VOL. CCXI, No. 2751

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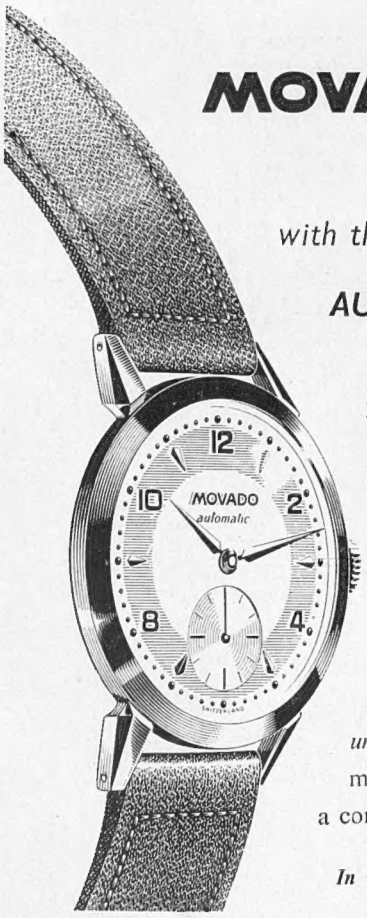

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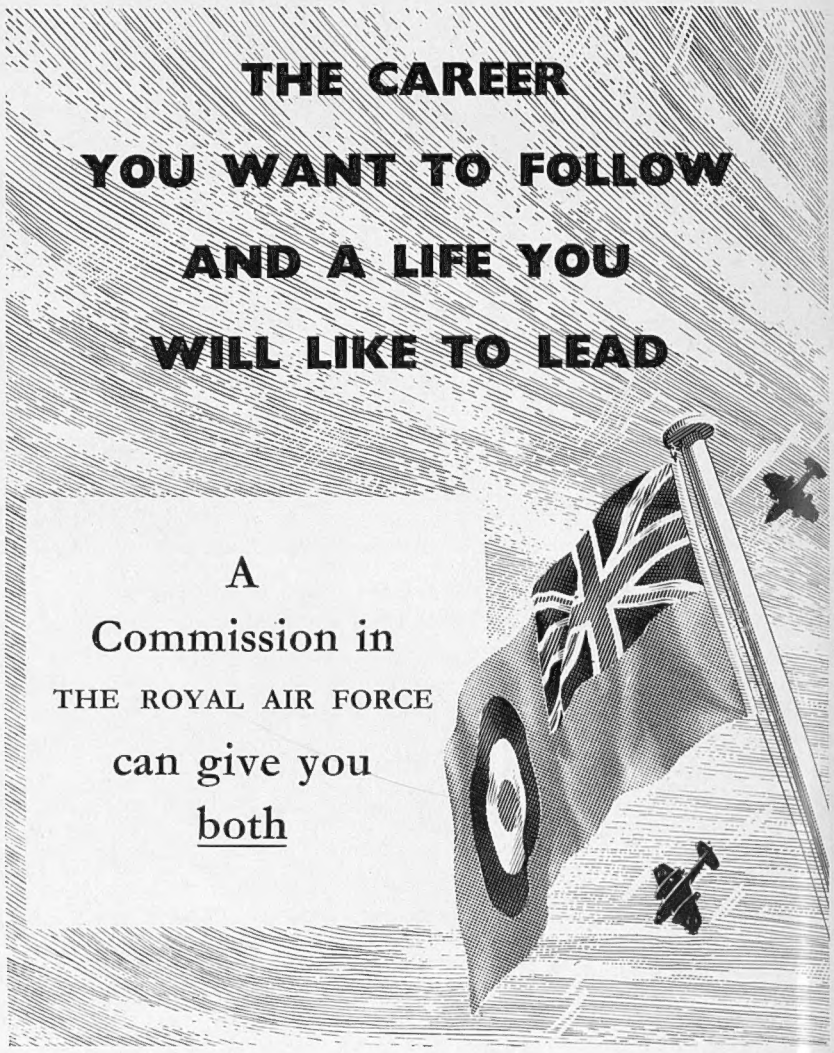

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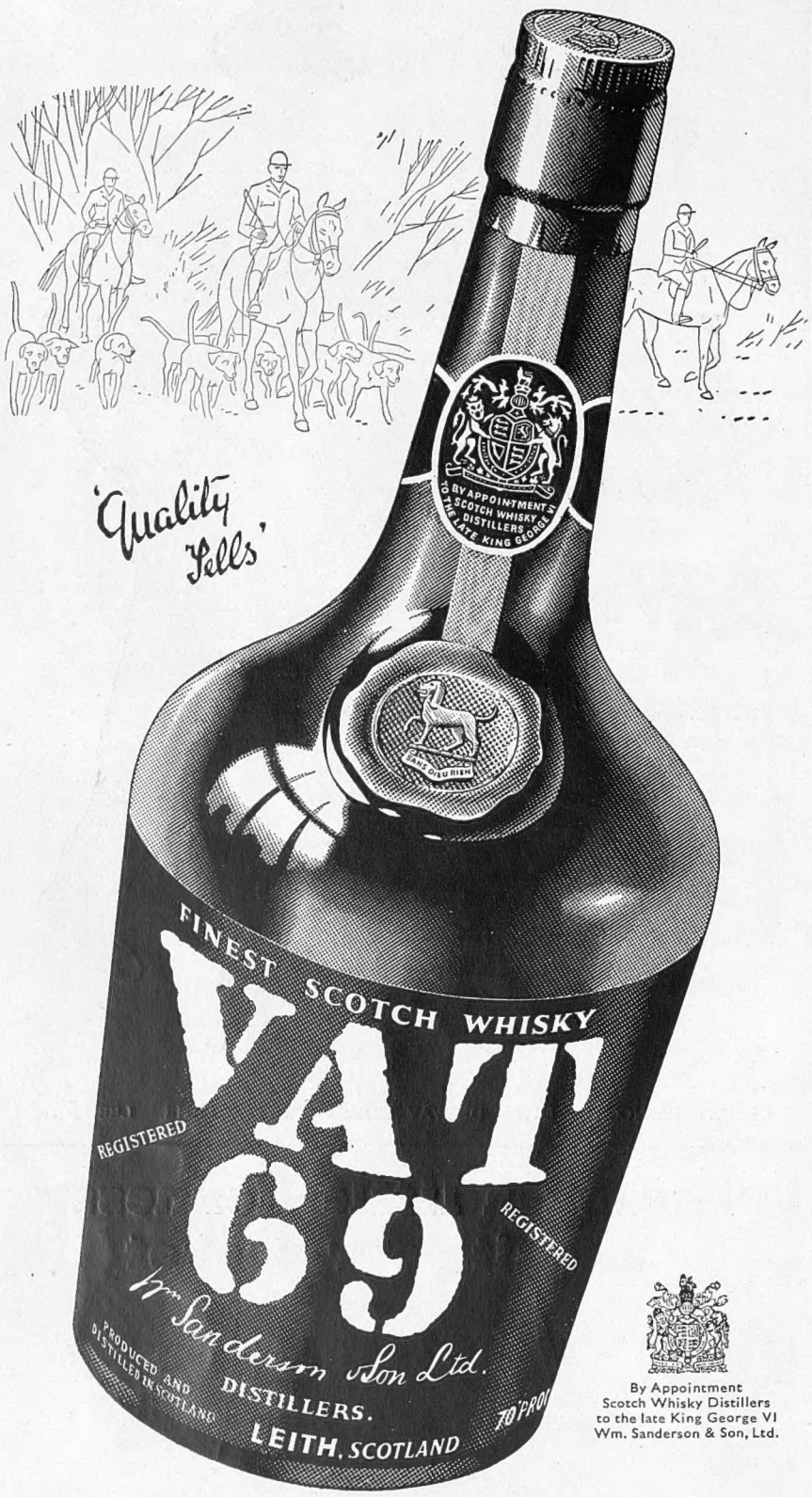

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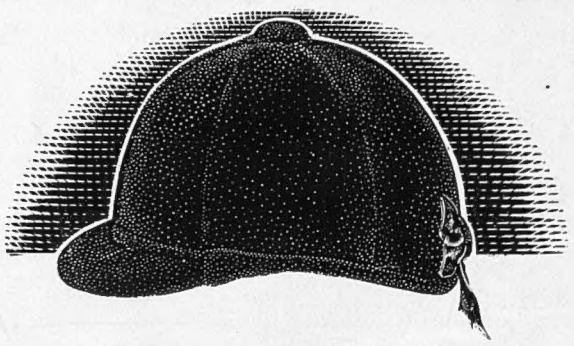

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Volume CCXI No. 2751 The SPHERE, London, November 1, 1952

The SPHERE

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THE STATE OF EMERGENCY IN KENYA—KIKUYUS BEING TAKEN THROUGH NAIROBI FOR QUESTIONING AND HOLDING IN CUSTODY AFTER THE MURDER BY MAU MAU MEMBERS OF SENIOR CHIEF NDERI AT NYERI, IN THE KIKUYU COUNTRY: The murder, which has deeply shocked public opinion in Kenya, occurred last week, three days after the declaration of a state of emergency and the arrival by air of a battalion of the Lancashire Fusiliers to help cope with the Mau Mau terrorists.

The organisation of lawlessness in Kenya Colony has proceeded apace in recent weeks, aided by the fact that there were delays in sending the Governor-Elect to his post. Now every effort has been made by the authorities to stem the tide of Mau Mau terrorism, and on October 20 a state of emergency was declared. The Governor, Sir Evelyn Baring, has emphasized that the grave step of declaring an emergency has been taken most unwillingly by the Government of Kenya, and he says that the Government has no intention of penalising anybody merely on account of his political views. The fact that Senior Chief Nderi was murdered only three days after the declaration is an indication how seriously the situation in Kenya has deteriorated and how necessary has been the reinforcement of the garrison. Since the death of Chief Nderi activity has centred on the Kikuyu area, and last Sunday it was reported that thirty Mau Mau suspects were arrested at an oath-taking ceremony at Nyeri. Much reliance has been placed in Nairobi on the visit of Mr. Lyttelton, Secretary of State for the Colonies, who last week expressed the intention of leaving for Kenya to see for himself what is going on in the colony. Further pictures from Kenya will be found on pages 186-87 of this issue.

Postage—Inland, 2d.; Canada, 1½d.; Elsewhere Abroad, 2½d.

The SPHERE with which is incorporated THE GRAPHIC

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FROM "THE SPHERE" OF 50 YEARS AGO

WHEN KING EDWARD VII WAS ENTERTAINED AT GUILDHALL: This was the scene in Guildhall during the City of London's greeting to the newly-crowned King on Saturday, October 25, 1902. On the King's left hand sat Queen Alexandra, the Prince of Wales (later George V) and Princess Christian, and on the King's right was Princess Victoria. The reception at Guildhall formed part of the ceremonies connected with King Edward's Coronation in Westminster Abbey.

NOTICE TO CONTRIBUTORS

Drawings.—*The Art Editor will be pleased to consider artists' specimens and has an especial interest in architectural, shipping, aeronautical, industrial and scientific subjects. It is essential that contributors have a high standard of technical accuracy, as well as of artistic merit. Artists should make an appointment with the Art Editor before submitting their work, or should write to him giving a brief description of its scope if they wish to send specimens through the post. All work should bear a short description and the name and address of the contributor, together with stamps for its return through the post should this be necessary. It is essential that the copyright of all drawings is at the disposal of the owner, as* THE SPHERE *generally publishes the work only after obtaining all rights.*

Photography.—*Topical photographs of news events and of personalities in the news will always be considered. It is absolutely essential that these are fully and accurately captioned. Negatives will not be considered and photoprints should be at least* 8 *ins. by* 6 *ins. The copyright of such pictures must be at the disposal of the sender, postage included for those sent by mail.*

Manuscripts.—*Articles and Synopses should always be sent direct to the Editor and, if possible, accompanied with illustrations and photographs. In each case the pictures should be adequately captioned. Articles are required on all subjects relating to the news of the day, ranging in length from* 750 *words to* 2,000 *words.*

IN NEXT WEEK'S ISSUE

THE SNOWDON NATIONAL PARK

By John May

An Illustrated Account of a Great Venture

A London Newsletter

195-198, STRAND, W.C.2.

A State of Emergency.—Only a few months ago life in Kenya "read like an idyll" to many who never set foot in Africa. The name Kikuyu recalled a dim religious controversy of pre-war days, the term Mau Mau had not been invented, and the idyll had been only slightly tarnished by 'tween-war memories of incidents among white settlers in whom the climate or drink had induced brain-storms. We had friends and relations long settled in Kenya who were contented and prosperous, and would not change their state or way of life for any inducements. A year or so ago we read one or two enchanting books on adventure and existence in the interior of Central Africa which vaguely warned us of nationalistic grievances and dangers. The Governor himself has now admitted the justice of Africans' impatience in matters of housing, educational facilities and participation in the civil administration. The warnings have proved all too swiftly justified. To-day Kenya is placed in a State of Emergency. Troops and warships have been drafted in and directed there. The drum has beaten with a vengeance, and murder and rapine are rife. I hear news periodically out of Uganda. It suggested (until yesterday) that there the idyll we attached up to last year to Kenya, existed in Uganda. But I wonder what those jolly, smiling house-boys who do the white man's chores, talk about in their native Luganda. The Mau Mau of the Kikuyu in Kenya are a small section of a mainly responsible tribe. But white settlers themselves know little of what goes on at night in tribal settlements, nor for how long and over what areas grievances have been aired and plans laid. When the drum beats, it is like a bush fire before a wind. It may lay waste vast areas before it can be stopped. There is no cause for complacency or delay in reforms in any part of Central Africa. Nationalism is the contagious fever of the day, and no part of the earth is immune and no race of men so primitive as to resist the infection. Malaya and Indo-China are lessons for our learning, if we do not find them nearer home. It is possible even in England to be pained and surprised by the revelation of what people one employs, trusts and perhaps patronises, really think of us.

France and N.A.T.O.—Many an Englishman who reads more than the headlines of his daily paper and even devotes time to studying what he reads, finds the affairs of N.A.T.O. the hardest nut to crack among the burning questions of the day. European Premiers and Ministers, and many other chosen officials of front-rank ability, devote much attention or all their available time to matters of urgent and vital importance connected with those sometimes still obscure groups of initials, E.D.C. and N.A.T.O., themselves bound up with other not less important groups of letters (and nations), such as A.P. Even when all seemed to be proceeding smoothly while "Ike" hopefully organised the military end, the differences between Governments in the political sphere of organisation loomed dangerous in the background. To-day the French Government, parties and people, and General Juin himself, have brought to the front and into the limelight the enormous obstacles which lie ahead of the implementation of these vital ideals and safeguards. The French nation has suddenly become acutely conscious of her own dignity and importance, and resents the slightest suspicion of dictation or patronage. The French political parties reveal acute differences. The Government desires but is in no hurry to ratify E.D.C. without further safeguards against German participation in General Staff direction. MM. Herriot and Daladier have come out strong, and stronger, on M. Pinay's side, while MM. Reynaud and Meyer support early ratification. The cruxes are the fear of German rearmament (which would appear to be inevitable either way), the absence of Britain from E.D.C., and the fear that France's own little wars will be lost sight of in the effort to put Europe in a state of defence. Meanwhile General Juin has thrown verbal spanner after spanner into the works by talking outside his military brief and putting forth political theories, which are matters for the Statesmen, which cause consternation at N.A.T.O. headquarters and intense irritation to M. Pinay, and, indeed, to other party leaders and the nation. Lord Ismay's job to-day must be anything but a happy one and Mr. Eden's tact and persuasion will be tested to the full.

A Window on the Route.—Signs accumulate that if the arrangements for the Coronation are left too much to the traditionists and the precedent-worshippers, the ceremony will prove a splendid pageant for a few privileged and not always important people, and very far removed from a rite appropriate to a great Commonwealth and a modern democracy. Nor, for that matter, to the endurance which can fairly be asked of a young Queen. The Coronation Committee must be aware of these pointers; I am sure they will bow to some of the public demands, but Time is not on their side. They should make known very soon their second thoughts or the Coronation itself will lose a part of its interest for the general public and even for the Commonwealth nations—largely because the *fever* has started much too soon and the committee should have worked out its plans in absolute obscurity until next March, testing public opinion meanwhile with infinite care. Already a measure of disgust in the ordinary man has been created by the true tales of the profiteers in windows on the route and the experiences of those who have tried to secure places for viewing the procession: £500 is not a maximum price offered for a small window giving an oblique view. Already we become bored or bilious from the chit-chat about peers' robes (and their cost), about arrangements for temporary buildings for their smooth entry and departure, their feeding arrangements and the organisation of their transport. Already we are gaining a probably false impression that the precedent-pundits are winning all the way and are devising a super-pageant for privileged English, a test of endurance for the Queen and a triumph for themselves. More and more people assure me that what they want is a short and simplified and solemn rite in the Abbey in tune with an age unlike that of any previous Coronation age, and an age of austerity at that.

A Faulty Start.—They want no cheese-paring, no cheap show inside the Abbey or outside. The Abbey accommodation is limited and cannot or should not be enlarged, but at least half the accommodation available to peers should be made available to important people in other fields and from the Commonwealth. As for a "black market" or profiteering in windows and stands, it should be prevented at once by law, and tolerable accommodation along the route be provided for people who cannot pay a fortune for a ten-minute view. The "dollar-earning conception" of a great act of dedication already holds the field. The slick are cashing-in on a great chance to make money out of a religious ceremony, the back-stairs boys are worming their way in, and abroad soon enough we shall deserve once more our contemptuous

THE 1952 CHRISTMAS NUMBER OF "THE SPHERE"

Pauline Baynes's cover design for the Christmas Number of "The Sphere," showing the young Queen Elizabeth I out riding in the snow, has already attracted attention on the bookstalls. This special number will be published on November 13 at 3s. 6d. a copy. It contains many pages in full colour, including a four-page section by Miss Baynes; original paintings by Montague Dawson, the celebrated marine artist, illustrating the story of Paul Jones; and an article by C. H. Gibbs-Smith on the early days of ballooning, with some delightful colour reproductions of early engravings and water-colours. There are many other attractive features in colour and black-and-white, including the revival of a little known short story by Wilkie Collins.

Copies of "THE SPHERE" Christmas Number can be ordered through any railway bookstall or newsagent, or from The Publishers, Ingram House, 195, *Strand, W.C.2.*

label—"a nation of shopkeepers." How much better if our Coronation committees had been salted from the start with more representation of the common man and Commonwealth. How much better if the experts-in-precedent had recognised the incontrovertible fact that Queen Anne is dead and that young Queen Elizabeth II. reigns in an England and over a Commonwealth almost as different from the age of George V. as from the age of Anne. It is late, but not too late, for the Government to make a pronouncement on policy and plan, indicating that these changes and facts are appreciated and will be given attention, and that the old pageant-masters are to be curbed and directed to more appropriate, more simple, more democratic and more international aims. Unless these impressions are quickly removed by some official pronouncement of policy, a section of the public will become first bored and then indifferent, as they usually do become when they hear *ad nauseam* of a public performance or première designed for the profiteer and the privileged and not intended for the "common" man.

Perpetual Motion.—We have come to realise in the last fifty years (longer, perhaps, and back to Bonaparte), that there is one thing a tyrant, a dictator, an aggressor cannot do—and that is mark time. Forever he must keep the juggernaut movement going, for if the machine of his nationalism or aggression stutters and stalls, his own revolutionary career is instantly in danger. He exists only in driving faster, in opening his mouth wider in his demands. If he moderates in speed or intransigence, the weaknesses of his features and situation are made plain to critical eyes. It was so with Hitler, it is very much so with Mossadek. It must be so with individual and national aggressors. A settlement is fatal to career or cause. The "enemy" must be preserved as the enemy, for fear of the "enemy" alone keeps the peoples faithful to the liberator and patient to endure the privation which is the price of "freedom" or self-determination or emancipation. It pays Stalin to keep alive the spurious fear of Capitalist aggression and encirclement. When fear of war is removed, the first "art of peace" to raise its head is cool criticism of Governments. It pays the revolutionary movement in China to continue the war in Korea not only because human life is cheap, but because hate is the best spur to revolution and aggression, and it pays Mossadek to carry still further Persia's estrangement from friendly Powers willing to and capable of helping her in her bankruptcy, because that help or any approach to settlement spells ruin to his own demagogic leadership.

Work for the Elderly.—A sub-committee to draw up recommendations advising employers in industry as to the best means of employing the elderly is to spring from the N.A.C. on Employment. The Minister has decided on this in view of the shortage of labour, and perhaps of the plight of many thousands of men still in their prime of life and skill. When I was born, measures were still being passed to prevent child labour and exploitation. We have run full circle, and now we must press the elderly into the factories. But that is only superficial. The experience of thousands of skilled, useful experienced men is that they are too old not at sixty but at forty. And why? Because paternal Government, in the laudable effort to ensure to all the means to live, when at last they retire, without acute financial worry, has so hardly pressed on the employers that they dare not take on a man, even of wide experience, unless they can be sure of extracting from him the full value of all his active years. If he can offer anything short of all, he cannot "pay" his employers. His experience, integrity and industry are not "enough," spread over even twenty years. The sad stories of search for work by skilled men of middle age point irresistibly to the conclusion that this problem has indeed been made a "question of accountancy," first and foremost. Fears expressed as to the risk of accidents increasing in men termed "elderly" are side-issues. A healthy man of fifty is less prone to forget precautions or neglect them than a youth imbued with the recklessness of post-war mentality. And as this question of accountancy dominates the problem, thousands of our best craftsmen in many trades are eating their hearts out and in them are locked secrets of technique and skill in many fields which will die with them and never more be handed down to the new generations of workers who may lack not only their skill, but their pride in good work and craftsmanship.

"C" Licences and Speeding.—Much of the business of lay magistrates to-day is concerned with road offences, of which the fining of drivers of "C"-licence vehicles convicted of exceeding 30 m.p.h. brings in a fair harvest. A recent decision in the Appeal Court makes me wonder how much of that harvest was unjustly reaped. The appellant had been fined and his licence endorsed by a Nottingham Bench on conviction of testing-out his new van on a splendid road at 50-55 m.p.h. Lord Goddard allowed his appeal on the ground that the van *was not carrying goods at the time*. He added *obiter* his sympathy for lay magistrates, who had to plough their way through a multiplicity of regulations dealing with such road offences. He had been given a collection of such Statutes and Orders by a Chief Constable which ran to 400 pages, and were in the mass quite beyond a layman's comprehension. The L.C.J. often flatters, often frightens, often jolts poor Muddlecombe, J.P. On this occasion he made me guiltily wonder whether we have not for years snatched a large and unlawful harvest from ground very sketchily ploughed.

THE OLD STAGER

COMMEMORATING THE RAILWAYMEN WHO LOST THEIR LIVES AT HARROW AND WEALDSTONE

A MEMORIAL SERVICE, ATTENDED BY LORD HURCOMB, CHAIRMAN OF THE BRITISH TRANSPORT COMMISSION, IS HELD AT ST. MARYLEBONE PARISH CHURCH: In addition to commemorating the railway employees who lost their lives in the railway accident at Harrow and Wealdstone Station, the service was also held as a thanksgiving for those whose lives were spared. The Rev. W. P. Baddeley officiated, assisted by the Rev. J. D. Richards, and the address was given by the Bishop of Stepney, the Right Rev. Joost de Blank, who said that 43 of the 112 killed in the disaster and 114 of the injured were employed on the railways. The widows of the driver and fireman of the Perth express, and the widow of the driver of the Manchester express, were among the many relatives of the killed and injured who were present at the service. Among the many representatives of the railways, in addition to Lord Hurcomb, were the Minister of Transport, Mr. John Elliot (Chairman, Railway Executive), Mr. J. W. Watkins (Chief Regional Officer, London Midland Region) and Mr. S. G. Hearn (Operating Superintendent). The Mayors of St. Pancras, Watford and St. Marylebone and the Chairman of Harrow Council also attended, as well as representatives of all the organisations, including the American Forces, which helped in the rescue work at Harrow.

ILLUSTRATED NEWSPAPERS HOLD THEIR ANNUAL PHOTOGRAPHIC EXHIBITION AT INGRAM HOUSE

"ELEMENTARY ANGLING": This was one of the entries of L. W. Burrell in the first annual photographic exhibition of the Ingram House Photographic Society, the President of which is Sir Bruce Ingram.

"AUTUMN FLOWERS": This contribution to the annual photographic exhibition at Ingram House is the work of W. H. Smith.

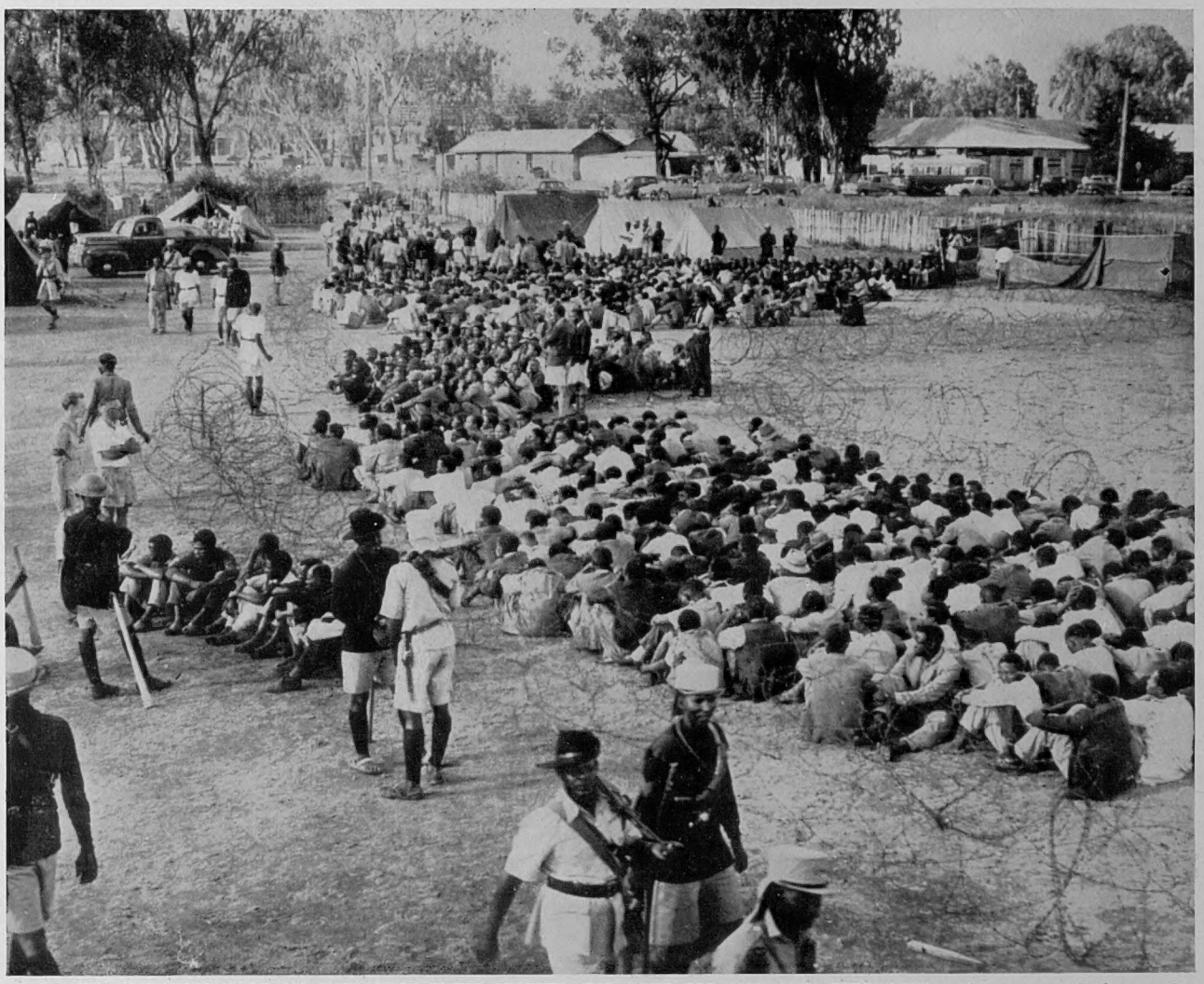
"PAT": An example of feminine portraiture submitted by W. J. R. Phillips.

THE LONDON APPRENTICE: This is the work of E. W. C. Horswill, who with his entry, St. Martin's, gained one of the prizes in the exhibition.

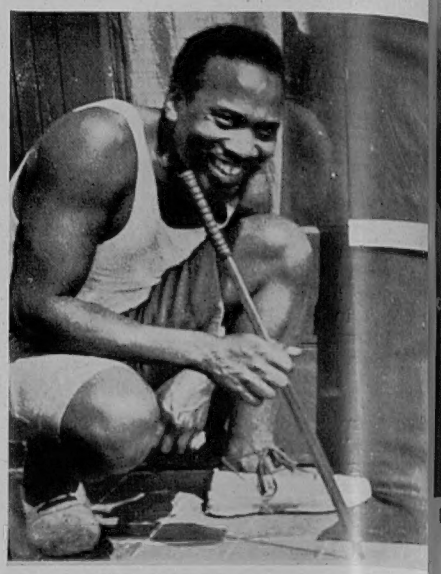
Since it first came into being over half-a-century ago THE SPHERE has published most of the great news photographs of the day, and it is little wonder that among the staff of the Illustrated Newspapers Group there is an abiding interest in photographs and photography. Last year this interest found a new outlet in the Ingram House Photographic Society, and the Society, which has prospered exceedingly during the year under the presidency of Sir Bruce Ingram, Editor of *The Illustrated London News*, has now held its first annual exhibition. The judging took place at Ingram House on October 22, and the pictures were judged by Mr. W. Gardner, President of the South London Photographic Society. Four of the exhibits are reproduced above.

The CRISIS IN KENYA

THE ROUNDING-UP OF MAU MAU SUSPECTS IN THE EAST AFRICAN COLONY WHERE A STATE OF EMERGENCY HAS BEEN DECLARED



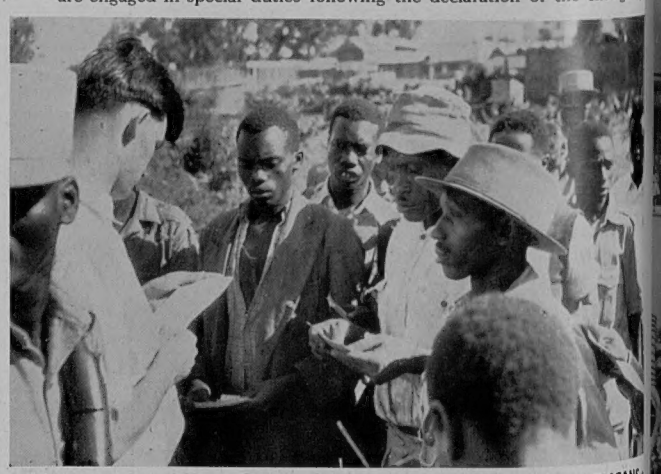
AFTER THE DECLARATION OF AN EMERGENCY THERE STARTED THE HUNT FOR MAU MAU TERRORISTS : Africans watched over by Kenya police within barbed-wire entanglements on the sports ground at Nairobi. After the murder of Senior Chief Nderi at Nyeri, near Nairobi, the hunt for suspects was intensified, and among the hundreds who were screened about 10 per cent. were detained. It is still not certain whether the ringleaders of the Mau Mau organisation are under lock and key.



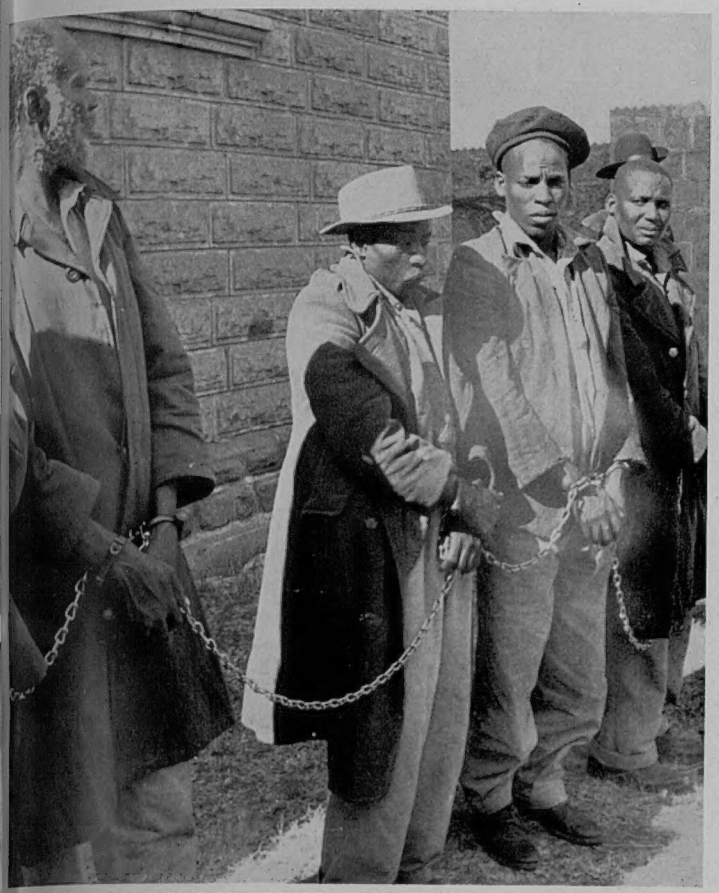
JOMO (BURNING SPEAR) KENYATTA, WHO WAS ARRESTED IN THE BIG ROUND-UP : Jomo, who has an English wife whom he has deserted, is the head of the 100,000-strong African Union of Kenya. The Kenya African Union is the only democratic political organisation of Africans. It is said that its organisation has now been smashed.

CHARGED WITH THE MURDER OF SENIOR CHIEF WARAHIU : Gahugu being interrogated by Superintendent Aubrey of the Kenya C.I.D. With them is an armed native policeman. Three men had been charged with this murder, which came as the climax to a long series of outrages in which nearly forty people have been murdered.

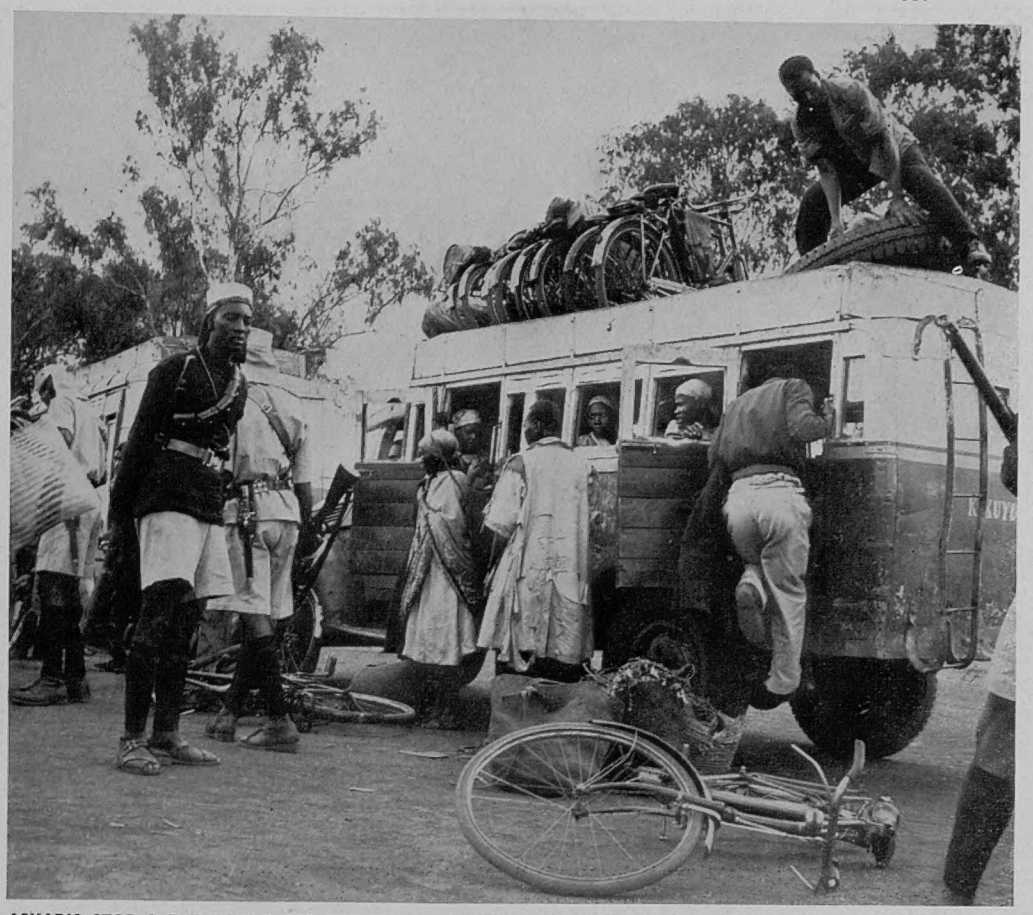
THE BARRICADES ARE UP IN THE STREETS OF NAIROBI : A native policeman on duty at one of the barricades. To-day parts of Nairobi have the aspect of a city in time of war. Life for the citizens has developed into a battle, not against the Mau Mau, but against sleep, so many of them are engaged in special duties following the declaration of the emergency.



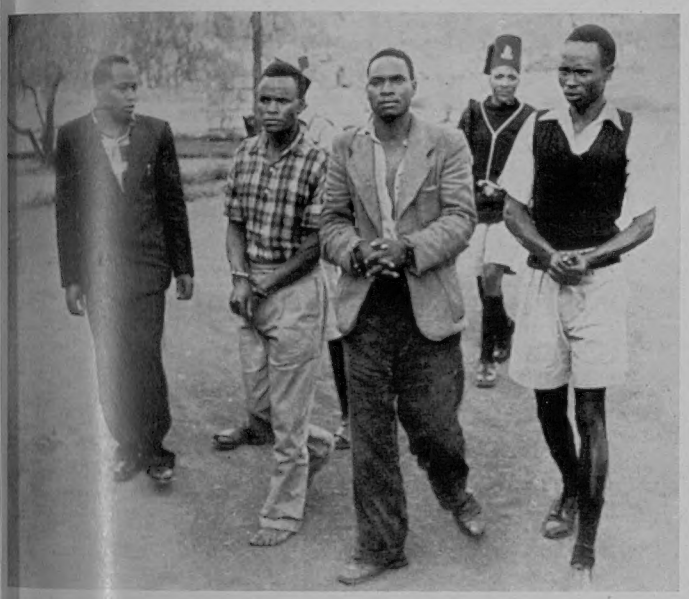
A SPECIAL POLICEMAN INSPECTS THE CREDENTIALS OF AFRICANS : He is working at one of the check-points set up by the police in order to prevent Mau Mau terrorists escaping through "the net." *On left*—Members of the Mau Mau behind barbed wire in Nairobi. Suspects are invariably examined for the seven incisions which are part of the Mau Mau ritual.



IN THEIR CASE SUSPICION VERGED ON CERTAINTY : Terrorists in chains after arrest and interrogation in Nairobi. Most of the men detained have come from the Kikuyu country, where the Mau Mau activities have been at their height. It was at Nyeri, in the Kikuyu country, that the Senior Chief Nderi was murdered last week.



ASKARIS STOP A BUS BOUND FOR THE KIKUYU COUNTRY AND REMOVE THE PASSENGERS FOR QUESTIONING : As a result of this police round-up of Kikuyus those who have not been rounded-up have collected food and trekked into the vastness of the Aberdare Mountains. This movement has been causing disquietude in Government circles, as it is thought that it may presage an insurrection.



BERNARD GATU, HIS HANDS MANACLED, SEEN WITH TWO RELATIVES AFTER HIS ARREST : Gatu (centre) was suspected by the police of having had a part in the murder of Senior Chief Warahiu.

THE NAIROBI ROUND-UP : Natives awaiting transfer to a compound for screening after being brought in from the streets. Some were in the market-place, others were on their way in or out of town, others were in their homes. All were removed at once whatever they were doing, and the long business of screening was put in hand.

THE ROUND-UP IN NAIROBI : *Left*—Police standing beside bicycles belonging to natives who had been arrested and removed to the outskirts of the city for screening. *Right*—The round-up in progress, with Europeans looking on as the suspects were led away. Squads of troops and police have been hunting down Mau Mau adherents in all parts of the city, and this has led to the interrogation of many innocent people and to much hardship. This has aroused the deepest resentment among Africans.

MR. CHURCHILL AT THE ALAMEIN REUNION IN THE EMPRESS HALL, LONDON : In the front row in this picture are, from left to right, Field-Marshal Lord Alexander, the Minister of Defence ; Mrs. Churchill and the Prime Minister ; Field-Marshal Lord Montgomery ; General Ridgway, the Supreme Commander, Allied Forces in Europe ; and Mrs. Ridgway. In his address the Prime Minister said that we would do the utmost in our power to make sure that the cause for which we had fought in the past and which we had preserved in the past should not be cast away. We sought nothing for ourselves, neither territory nor wealth, and as for fame we had it in the discharge of our duty. General Ridgway said that until the North Atlantic Treaty Organisation had sufficient military forces, backed by adequate reserves, we should continue to stand in danger of losing those priceless possessions which it was the first duty of any Government to preserve. It was his duty to say that we had not yet got those forces.

THE ALAMEIN REUNION

THE QUEEN AT SHREWSBURY SCHOOL

BOYS OF SHREWSBURY SCHOOL TAKING SNAPSHOTS OF THE QUEEN AS SHE WALKED THE TERRACE WITH THEIR HEADMASTER : The Queen, with the Duke of Edinburgh, was taking part in the fourth centenary celebrations of Shrewsbury School. The school Charter, signed by King Edward VI and dated February 10, 1552, was on display in the library. By the Queen's Command the headmaster, Mr. J. M. Peterson, announced that the Christmas holiday this year would be extended by three days, and the boys added a fourth cheer to the three he called for when they heard the news. The Royal party had luncheon in the School House with the præposters and five senior boys from each of the ten houses. The head of the school, Colin D. St. Johnston, sat between the Queen and the Duke of Edinburgh during luncheon.

THE QUEEN CUTTING THE RIBBON AT THE OPENING OF THE NEW TERRACE AT SHREWSBURY SCHOOL : With her is the headmaster, Mr. J. M. Peterson. The terrace was constructed along the length of the buildings to mark the school's fourth centenary. It gives a view down to the River Severn.

THE SENIOR NAVAL OFFICERS AND SCIENTISTS CONCERNED IN THE MONTE BELLO ATOM TEST, PHOTOGRAPHED ABOARD H.M.S. "CAMPANIA": They are, from left to right, Dr. O. M. Solandt (Chairman Canadian Defence Committee); Professor L. H. Martin (Melbourne University); Dr. W. G. Penney (who was responsible for the design of the atom bomb and has since been knighted); Rear-Admiral A. D. Torlesse, D.S.O. (who commanded the Monte Bello operations); Captain A. B. Cole, D.S.O., R.N. (Commanding *Campania*); Mr. W. A. S. Butement (Chief Scientist, Commonwealth Department of Supply and Development), and Dr. L. C. Tyte (Ministry of Supply, Technical Director). *On the left* are five pictures showing various stages of the explosion.

The Detonation of
BRITAIN'S FIRST ATOMIC BOMB
And America's Atom Guns in Action

On left—

A SERIES OF FIVE PICTURES SHOWING CONSECUTIVE STAGES IN THE FORMATION OF THE CLOUD OF SMOKE AND DUST WHICH AROSE AFTER THE DETONATION OF BRITAIN'S FIRST ATOMIC BOMB: In the House of Commons, Mr. Churchill reported that the object of the test was to investigate the effects of an atomic explosion in a harbour. The weapon was accordingly placed in H.M.S. *Plym*, a frigate of 1,450 tons. Conditions were favourable and care was taken to wait for southerly winds so as to avoid the possibility of any significant concentration of radioactive particles spreading over the Australian mainland. Specimen structures of importance to civil defence and to the armed services were erected at various distances. Instruments were set up to record the effect of contamination, blast, heat flash, gamma ray flash, and other factors of interest. The weapon was exploded in the morning of October 3. Thousands of tons of water and of mud and rock from the sea bottom were thrown many thousands of feet into the air and a high tidal wave was caused. The effects of blast and radioactive contamination extended over a wide area, and H.M.S. *Plym* was vaporised except for some fragments which were scattered over an island and started fires in the dry vegetation.

TWO OF AMERICA'S GIANT ATOM GUNS BELCH FLAME DURING A RECENT DEMONSTRATION: These 75-ton "Big Berthas," designed to fire atomic shells, are now said to be ready for use against troops in the field. The guns are the largest pieces of mobile artillery ever devised, representing the U.S. Army's bid to gain control of the tactical employment of smaller-sized atomic weapons which are acknowledged to be in production.

It has not so far been suggested that America's huge new guns have actually fired atomic shells, and tests so far have been made using conventional ammunition and propellants. Using atomic shells, however, these weapons could give a ground commander tremendous power at his finger-tips and directly under his control. They would be especially effective in defence against attacking ground forces obliged to mass and expose themselves in assault. Unlike atomic bombs dropped by air, the atomic gun can function in all kinds of weather, night or day. It is essentially an artillery piece, but with immeasurably greater power than any artillery previously known. It can fire with an accuracy comparable to conventional artillery, and tests have indicated that at long ranges it is much more accurate. The rate of fire seems to be that of any large-calibre gun

PLANNING AUCKLAND'S HARBOUR BRIDGE

A VITALLY NEEDED ROAD LINK IN THE NORTH ISLAND OF NEW ZEALAND

For a quarter-of-a-century and more the people of Auckland, New Zealand's most populous city, have dreamed of a bridge across their harbour, not through any desire to emulate Sydney, on the other side of the Tasman, but because conditions in the two great cities are very similar. Like Sydney, Auckland has a big north shore population, and in recent years the four boroughs of Devonport, Takapuna, Northcote and Birkenhead, which now have a joint population of over 35,000, have grown remarkably. The only way for the residents of these boroughs to reach the centre of Auckland is by ferry, and for them a bridge is now a vital necessity. With the bridge completed Auckland's planners indeed visualise that in half-a-century the total population of the northern boroughs will exceed 100,000.

Last week the Auckland Harbour Bridge Authority brought its plans a stage nearer when it awarded the contract for the harbour bridge to the British firms Dorman Long and Company of Middlesbrough and the Cleveland Bridge and Engineering Company of Darlington. The contract, won in the face of competition from foreign firms, is worth £4,236,000. Each of the firms will make approximately half of the steelwork necessary for this mighty bridge, and will work together on the construction of the foundations and the superstructure. The bridge, which will absorb something like 10,000 tons of steel, will be 3,520 ft. long and will include an 800-ft. span over the navigation channel through Waitemata Harbour, as well as six other spans.

A report on the tenders received by the Harbour Bridge Authority was published in New Zealand in June. It had been prepared by the Authority's consulting engineers, Freeman, Fox and Partners, of London, who said that among the other tenders were those of the Pacific Bridge Company of San Francisco, who offered to build the bridge at a cost plus or target price basis of £7,000,000, and who also advanced a tentative scheme for a suspension bridge, again on a target price basis. A French firm, Entreprises Metropolitaine et Coloniales, made an offer for the fabrication of the steelwork only. The Cleveland Bridge–Dorman Long tender excludes all customs, import duties and taxes from the quoted price. The firms propose taking to New Zealand 160 men —mainly craftsmen—from England and Ireland to form the hard core of the necessary labour team. The remaining labour will be recruited in New Zealand. Allowance is made in the tender for a sum of £115,000 for the passages and housing of the men taken to the Dominion. The Cleveland Bridge Company and the Dorman Long Company are the two biggest bridge-building concerns in Britain. The former organisation has built, among others, the £2,500,000 New Howrah Bridge at Calcutta and the £1,700,000 Lower Zambesi Bridge in Portuguese East Africa. At present it has under construction £2,000,000 worth of bridging in Thailand and Britain. The Dorman Long organisation built the famous Sydney Harbour Bridge between 1924 and 1932. Just before the Second World War, Dorman Long constructed Denmark's Storstrom Bridge, worth nearly £1,500,000.

Auckland's new bridge, actual work on which will be begun in about three years, is only part of a major development plan for the whole city.

This plan, providing a framework for the city's growth and progress during the next half-century, was launched in 1941 on the instigation of the Town Planning Board in Wellington, and was continued by co-operation between sixteen Auckland local authorities and three New Zealand Government departments. In 1944 the Metropolitan Planning Organisation was formed and two years later a full-time expert staff was engaged. The plan covers about 300 square miles. Of this some 47 square miles is urban and the plan proposes to limit the enlargement of this area to a total of 109 square miles, within a kind of urban fence, and to safeguard the continued use of the remainder for rural purposes. This will mean that the City of Auckland can grow in a controlled manner from a population of 300,000 to one of about 600,000, which it may well achieve at the turn of the century.

Among other plans for the new and bigger Auckland are an underground railway system, a series of arterial traffic outlets, upper harbour developments, the rearrangement of the Auckland railway yards, fixing the site and acquiring the land for an international airport, and the construction of the Southdown-Avondale Railway.

Some of these plans are in the distant future; others, like the harbour bridge, are now in hand. What does emerge is that Auckland is not content to rise in haphazard fashion. Here is one of the most beautiful cities in the Southern hemisphere and her people mean to keep it so. **R. C. E.**

THE SITE OF THE NEW AUCKLAND HARBOUR BRIDGE, THE CONTRACTS FOR WHICH HAVE NOW BEEN PLACED: Looking across from St. Mary's Bay to Northcote Point, a view showing on the left where part of the small boat harbour has been filled in to facilitate the erection of the bridge approaches. Dorman Long of Middlesbrough and the Cleveland Bridge and Engineering Company of Darlington have secured the contract for the new bridge.

On left—

A FLEET OF PLEASURE-CRAFT WINTERING ON THE SHORES OF AUCKLAND HARBOUR: Now spring has come in the Antipodes the boats are being overhauled and are now taking to the water in readiness for the summer racing and cruising season. Some of Auckland's fine waterfront homes are seen in the background.

THE NEW IMPORT WHARF FOR THE PORT OF AUCKLAND: Adding to 24,000 ft. of berthage space already available, this extensive new wharf is part of the development of the port which serves the Auckland Provincial District. This view shows the construction which has now been pushed out into the harbour for three-quarters of the ultimate length. About 2,500 concrete piles have been driven and half the concrete decking is now finished. The steel sheet piling to line the approach has just arrived from Britain. The wharf is being built by a combination of New Zealand and American construction interests.

PRESIDENT TRUMAN DEMONSTRATES THE WHISTLE-STOP TECHNIQUE WHICH HE HAS MADE PECULIARLY HIS OWN : The President, in a setting of autumn foliage, speaking to the townspeople of Plaistow, New Hampshire, during his train tour of New England, in which he spoke for Governor Stevenson. Mr. Truman's slashing attacks on Eisenhower have been one of the features of the election, and in marked contrast to the much quieter methods of the man for whom he is campaigning.

AMERICA'S ELECTION LAST LAP

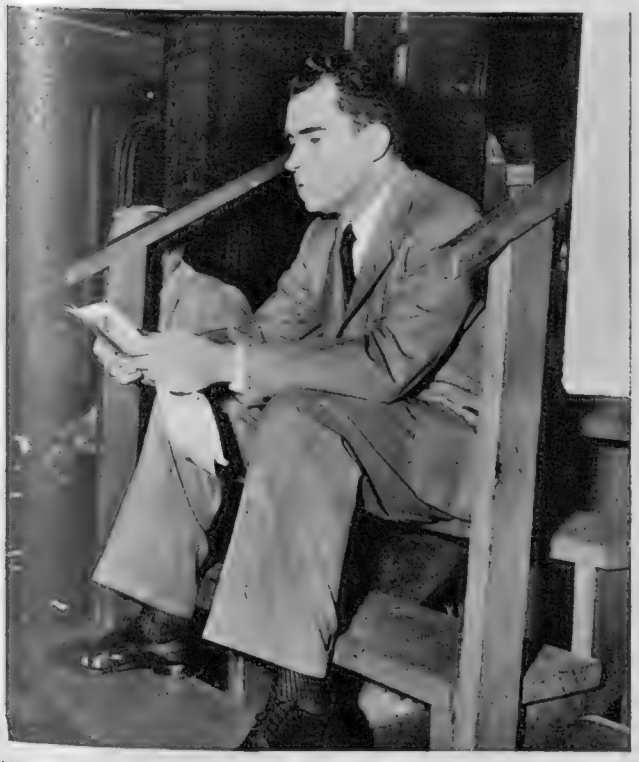
Eisenhower, Stevenson and Truman Stump the Country in the Intense Presidential Battle

On November 4 America will go to the polls to choose her next President. Four years ago the pollsters announced in advance that there would be a landslide in favour of Dewey and that nothing could stop a Republican victory. On that occasion they reckoned without the campaigning vigour and magnetic compulsion of Mr. Truman.

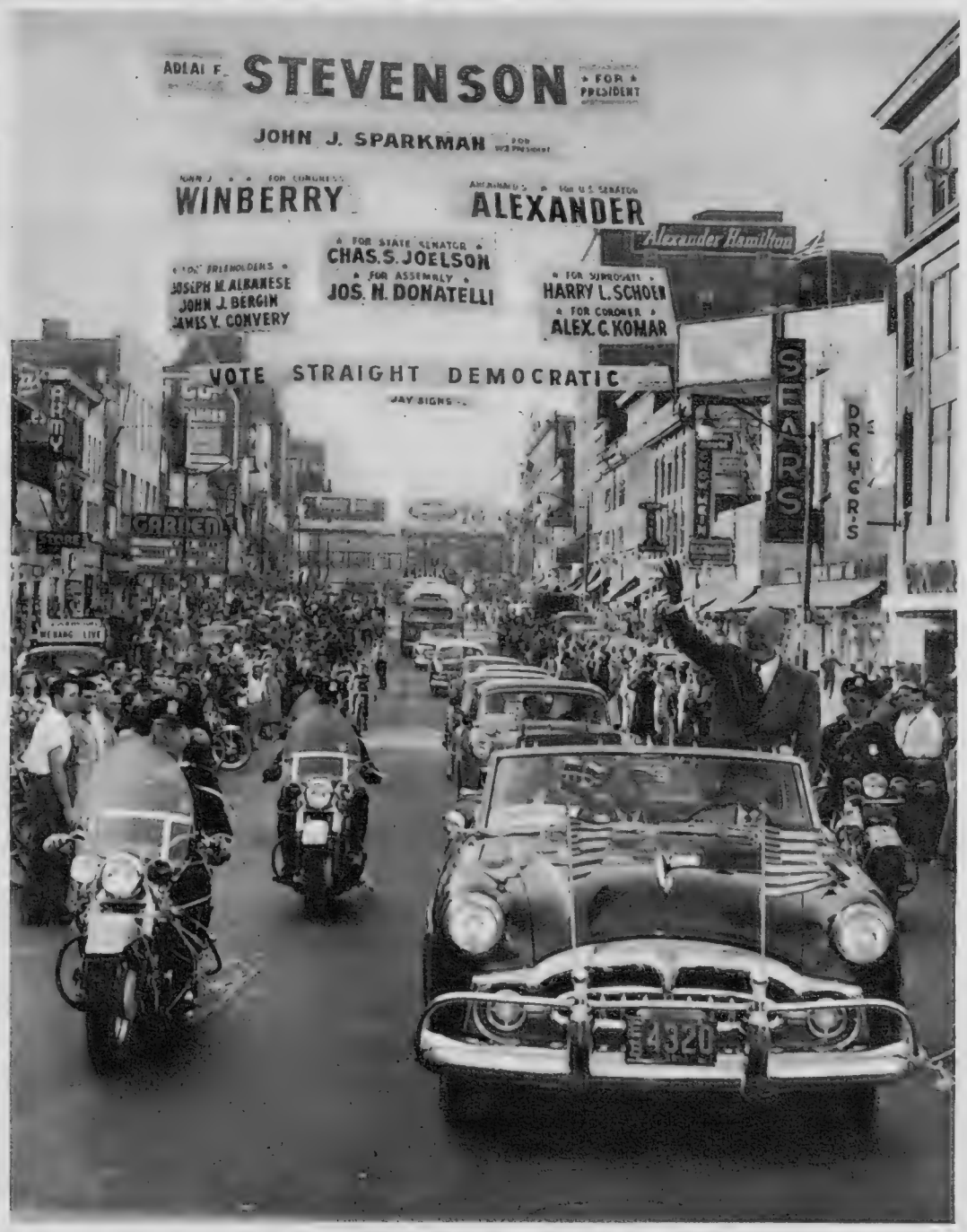
This time the poll forecasters are being more cautious (at any rate, at the time of writing they have eschewed downright prediction), but the opinion seems to be that Mr. Eisenhower has lost a great part of his long lead, and that Mr. Stevenson, by the very brilliance and sincerity of his speeches, has impressed his fellow-countrymen with the breadth of his outlook and with his obvious fitness for the highest office in the land. Mr. Truman has again been engaged on whistle-stop tours, piling on the accusations against the Republicans without stint and obviously enjoying the battle to the full.

Eisenhower's big problem has been to unite the two wings of the Republican Party, and this has often involved a change of tactics and a change of line from State to State. As one newspaper has said, Eisenhower has even endeavoured to be both a Nixon Republican and a Warren Republican in California, a feat of political contortionism which has probably not won him much new support.

THE REPUBLICAN CANDIDATE PROBES THE DEEP SOUTH : Mr. Eisenhower, holding a "10-gallon" hat and wearing a sombre expression, seen on arrival at Dallas, Texas. Many Texas Democrats may give him their votes owing to Stevenson's line on offshore oil.



MR. NIXON, ANOTHER REPUBLICAN IN THOUGHTFUL MOOD : The Vice-Presidential candidate studying his speech backstage in a Chicago theatre before going before a television audience.



EISENHOWER DRIVES THROUGH PATERSON, NEW JERSEY, BENEATH A BANNER PROCLAIMING THE CANDIDACY OF ADLAI STEVENSON : Throughout the desperately arduous campaign Eisenhower has fought with vigour if not with finesse, and the public have been impressed at least by his obvious rude health.

RALLIES AND FORGATHERINGS IN MANY PARTS OF THE WORLD

The Socialists in Milan; The Nationalists in Taipeh; The Big Ships in New York; The Bismarcks in Munich; and the Thoroughbreds in Laurel Park

SOCIALISTS FORGATHER IN THE DUOMO SQUARE IN MILAN: The gathering included delegates to the Socialist International Congress which has been meeting at the Royal Palace in Milan. Several leading European Socialists addressed the meeting, including Clement Attlee, Paul Henri Spaak (of Belgium), Guy Mollet (of France), Tage Erlander (of Sweden), and G. Saragat (of Italy).

MR. ATTLEE ON THE ROSTRUM: Britain's Labour leader in the Piazza Duomo at Milan, when he addressed the open-air rally held in connection with the Socialist International Congress. On the platform with Mr. Attlee is Angelica Balabanoff, a close associate of Mussolini in his Socialistic days and a life-long fighter in the Socialist cause. On the left is M. Spaak.

The Congress of the Socialist International brought many celebrated political figures to Milan, and perhaps the most abiding memory of the Congress will be the great gathering in the Cathedral Square, which Mr. Attlee so bravely addressed in Italian. He apologised for his poor Italian accent, but there was no doubt that his effort won deep appreciation from the Italian members of the throng.

Among the first subjects discussed by the Congress were Asia and the United Nations, and then came the thorny problem of European Union, which produced many clear-cut divergencies of thought among the delegates. The debate on European Union was held behind closed doors in Milan's Royal Palace, but the attitudes of the various delegations were fairly well known at the outset. European Union, and in particular the ratification of the treaty setting up the European Defence Community, will soon come before the French, German and other Parliaments, so the views expressed at Milan were of first-class importance. The question of a "Little Europe" of the six Schuman Plan countries was very much to the fore, as also were the well-known objections of the British Labour Party and the Scandinavians to any attempt to separate their countries from this "Little Europe" conception.

Another particularly vital discussion at the Congress concerned the admission to the Organisation of seven groups of Soviet exiles—the Menshevik and Socialist parties from Estonia, Latvia, Lithuania, Georgia, Armenia and the Ukraine.

Mr. Attlee opposed their admission at a meeting of the Council of the International. The British Labour Party's case, as put by Mr. Morgan Phillips, was that, while as anti-Communist as any other party, it resented the International being built up with refugee parties from territories now legally recognised as being incorporated in the Soviet Union. Though anti-Communist, they were prepared to discuss political questions with the Soviet Union, and he did not think it would strengthen the Organisation to be regarded as merely an anti-Soviet conspiracy. Communism had to be fought in a practical way, not through forces which were completely unrepresentative and had no means of influencing the public in their own territories. The Dutch, Germans and others supported the admission of the exiles. A compromise resolution from the French delegation, providing for them to attend meetings, but without the right to speak or vote, was carried in spite of the British opposition.

HE RIDES IN TRIUMPH THROUGH HIS OWN PERSEPOLIS: Generalissimo Chiang Kai-shek, leader of the Chinese Nationalists, acknowledging an ovation from the crowds during the celebration in his island capital of Taipeh, Formosa, of the forty-first anniversary of the Chinese Republic. In the course of the day the Generalissimo reviewed 50,000 members of the Nationalist forces, largely American equipped.

The fall of the China mainland was by no means the end of the China problem, declared Generalissimo Chiang Kai-shek in a forty-first anniversary speech at Taipeh, Formosa, and he went on to tell his audience of 200,000 that it was really the starting-point of the Pacific problem, of the anti-Communist and anti-Russian struggle.

"Our national revolution," said Chiang, "aims at delivering the people from the tyrannical rule of imperialists and leading them to the road of democracy, with the result that 'popular sovereignty' may be realised, and every one of our people may become an independent and free citizen of the country."

The General added that he would join his patriotic countrymen "to make amends for my past errors. Any criticism, so long as it is beneficial to our anti-Communist and anti-Russian struggle, and helpful to our national recovery and reconstruction, will be regarded as a guiding principle for me. No matter how dangerous it may be, I shall not refrain from any task.

"We are confident that all traitors will be exterminated and aggressive wars will fail," declared an optimistic Chiang. "Further, we are confident that our anti-Communist struggle will triumph and our anti-Russian struggle will succeed."

On right—

A DAY OF NATIONALIST ENTHUSIASM IN THE FORMOSAN CAPITAL: Crowds gathered outside the Nationalist headquarters to acclaim Generalissimo Chiang Kai-shek on the forty-first anniversary of the founding of the Chinese Republic. 200,000 people attended.

LINERS LINE THE NEW YORK WATERFRONT IN ONE OF THE MOST IMPRESSIVE ASSEMBLIES OF MERCHANT SHIPPING IN RECENT TIMES : This air view shows a most unusual sight along the piers of the Hudson River in Manhattan, with no fewer than seven big liners in port at the same time. From left to right are the *Media*, the *Mauretania*, the *Queen Elizabeth* and the *Georgic* (all of the Cunard White Star Line); then follow the French liner *La Liberté*, the American liner *United States* (holder of the Blue Riband), and the Italian liner *Conte Biancamano*. The picture was taken from a patrolling helicopter of the U.S. Coast Guard.

THE WEDDING OF MARI-ANN THE COUNTESS OF BISMARCK, AT BERGEDORF, NEAR HAMBURG : Mari-Ann, the great-granddaughter of Germany's great statesman Prince Bismarck, was married recently to Egbert von Oswald, the son of a Hamburg industrialist. The newly-married couple are seen in this picture acknowledging the cheers of the people from a balcony. The wedding took place at St. Mary's Church, Bergedorf, with a Catholic ritual ceremony. Over 120 guests were invited to the wedding. Among those present were Prince Oscar of Prussia and the Prince and Princess of Hessen.

On left—

THE SUDANESE NATIONALIST LEADER RECEIVES A KINGLY RECEPTION IN CAIRO : Sir Abdel Rahman el Mahdi (the son of the man who led the fanatical revolt of the dervishes, defeated General Gordon and was defeated himself by General Kitchener) being greeted by General Neguib, the Egyptian dictator, on arrival in Cairo from London. Sir Abdel had a positively kingly reception in Egypt, and was accommodated at the Loutfalla Palace during the period he engaged in talks with the Egyptian Government. Sir Abdel is the Chairman of the Umma (Independent Party) in the Sudan. He desires personal rule in a fully independent Sudan, having been very strongly opposed in recent years to the British policy of bringing the Sudan forward steadily towards self-government. When he had talked with Sir Abdel, General Neguib had completed his preliminary conversations with all the Sudanese leaders gathered in Cairo, and he was thus in a position to consider the Egyptian attitude on the future constitution of the Sudan following the British declaration on Sudanese self-government.

THE DUKE AND DUCHESS OF BISMARCK AT THE WEDDING OF THEIR DAUGHTER MARI-ANN, THE COUNTESS OF BISMARCK : The Duke of Bismarck is the grandson of Germany's "Iron Chancellor," who was created a Prince by Kaiser William I.

On right—

A BRITISH TRIUMPH ON THE AMERICAN RACE-COURSE : Mr. R. C. Boucher's Wilwyn, with E. Mercer in the saddle, winning the international race over 1½ miles at Laurel Park, Maryland, in the course record time of 2 mins. 30⅘ secs. Finishing second is the American horse Ruhe, and third, on the rails, is the other British entry, Zucchero, with Smirke up. In this country Wilwyn has never been considered quite in the top class (although having an impressive series of victories to his credit), and at the end of his three-year-old days the Jockey Club handicapper considered him to be 15 lb. inferior to last year's Derby winner, Arctic Prince, and 8 lb. behind Zucchero, the runner-up in the great Festival race. Last year Wilwyn failed in this race behind Supreme Court and Zucchero after running much too freely. He has now won eleven races in succession—a feat which no horse in this country has brought off for many years. He has a total of sixteen victories to his credit and has won in stake money this season nearly £18,000, the Laurel Park race being worth £11,607 to the winner. Wilwyn is a good example of international breeding. His sire, Pink Flower, was bred by the late Lord Astor and was by the German horse Oleander. His dam, Saracen, was by the Italian-bred Donatello II, who was by British-bred Blenheim.

HUNGRY HORSE, CHIEF JOSEPH and SCHENECTADY

Three Mighty Projects in Controlled Power in the United States

In the ancient country of the Flathead Indians, through which Lewis and Clark passed on their historic journeyings, in a land not so long ago the preserve of trappers and fur traders, of the pioneer settlers, President Truman recently carried out the dedication of one of the mightiest engineering products of modern times—the Hungry Horse Dam, one of those projects which are transforming the West.

Just why the dam is called Hungry Horse no one is quite sure, although some say that it was there that strayed animals from a pack team were once found by their owners, all the horses as thin as rails after weeks of poor foraging.

Hungry Horse Dam is a symbol of the new and expanding Western America in the tradition of Great Boulder. This mighty dam will help to control floods and improve navigation on the Columbia River system; providing water for irrigation and yielding power, not only directly, but by stabilising the river's flow, thus adding 500,000 kilowatts to the power of the Grand Coulee and other installations.

It is astonishing indeed just how many benefits are combined in this single structure. It will also help navigation on the Columbia, provide fertility to agricultural land in Montana, and is, in fact, typical of the American programme of long-range, multiple-purpose development.

In 1945 it was said in Congress that Hungry Horse Dam was not justified and should not be built, but already it is justifying itself commercially, and one brand-new heavy industry plant has already been built at near-by Silver Bow to operate on Hungry Horse electric power. In addition, a major aluminium plant is to be built at Kalispell, and it, too, will use Hungry Horse electricity.

President Truman, who pulled no political punches when speaking at the dedication of Hungry Horse Dam, told his listeners that if the Republicans had their way Hungry Horse would be turned over to the Montana Power Company. At neighbouring Libby he told the people that the Libby project would probably never come to fruition, with the Republicans in control. "The Republican Party has a long record on public power," the President affirmed, "and it is all bad."

On left—

THE THIRD HIGHEST AND THE FOURTH LARGEST CONCRETE DAM IN THE WORLD NEARING COMPLETION NEAR KALISPELL, MONTANA: The last deliveries of cement being made along the cableways at Hungry Horse Dam, which was dedicated last month by President Truman during one of his whistle-stop tours of the United States. The dam, lying in North-Western Montana, on the south fork of the Flathead River, twenty-three miles from Kalispell, has cost 103,000,000 dollars. Behind the dam the reservoir stores 3,500,000 acre feet of water, and 800,000 kilowatts of power are now added to the power pool.

On right—

THE FOUNDATION FOR A HUGE STEEL SPHERE WHICH WILL HOUSE A NUCLEAR SUBMARINE POWER PLANT DURING TEST OPERATIONS: The saucer-shaped foundation, 179 ft. in diameter, has been built at West Milton, New York, by the Atomic Energy Commission for the United States Navy. It will support a 225-ft. steel sphere, the largest ever built, to house the atomic power plant. Work on assembling the hull of the land-based prototype submarine is under way near by. The spherical design of the reactor building was adopted to give protection to personnel during the trials, should other controls break down.

The great steel sphere which is to be built at West Milton, 18 miles north of Schenectady, has been designed to contain the released radioactive material from the atomic plant inside, should all other controls simultaneously fail. The hull of the land-based submarine will be assembled just outside the building, and when the latter is completed and tested the hull will be skidded into the huge sphere through a special wall section, which will again be sealed before the test operations are continued. Every weld in the great ball must be X-rayed to ensure that there are no leaks. To do this on the bottom, a 4-ft. space is provided temporarily between the base of the sphere and the concrete saucer. After testing is completed, this space will be filled with concrete and aggregate. Inside, the concrete floor on which the reactor will rest will be slightly above ground-level and the well of the saucer beneath the floor will be filled with compacted mixture of aggregate and earth. The reactor building will be air-conditioned. This is one of two nuclear science approaches being made in the United States to the problem of utilising atomic fuel for submarine propulsion. The other is incorporated in a project at the National Reactor Testing Station in Idaho. The reactor designed for the West Milton site will use liquid sodium metal to take the heat out of the reactor core and into an exchanger or "boiler," where water will be converted to steam. The steam will then be used to drive the turbines that propel the submarine.

BUILDING THE GREAT CHIEF JOSEPH DAM ON THE COLUMBIA RIVER IN NORTH-CENTRAL WASHINGTON, A MIGHTY HYDRO-ELECTRIC PROJECT WHICH WILL BE THE SECOND LARGEST POWER PRODUCER IN THE WORLD: This aerial view shows the bend of the river 1½ miles east of Bridgeport, where a giant cofferdam has been constructed and within which is now being built part of the dam and spillway. Chief Joseph Dam, named after a celebrated Nez Percé Indian leader, will ultimately harness the turbulent Columbia River for 1,728,000 kilowatts of electrical energy. Since the first bucket of concrete was placed within the shuttering in September 1951 remarkable progress has been made with this mighty project. The first seventeen generating units should be in operation by August 1956.

In the building of the Chief Joseph Dam, the second largest power project in the history of the world, there will be perpetuated the name and fame of the Indian of the Nez Percé tribe, who in war and peace played his part in the history of North-West America in the pioneer days.

In 1877, after a disagreement over Indian lands taken by the United States, Chief Joseph led a major portion of the Nez Percé tribe on a flight into Canada. This developed into the Nez Percé War, in the course of which Chief Joseph revealed himself to be a strategist of the first order. The Chief and his followers were eventually captured, but it took all the Federal military cunning and strength available at the time to do it. This Indian group was later settled on the Colville Reservation, which has its southern boundary on the Columbia River in the vicinity of Grand Coulee and the new construction site. Chief Joseph continued as tribal leader until his death in 1904. His leadership in the closing years of his life made him a greatly revered figure in the life of the North-West.

Now, forty-eight years later, the vast dam which bears his name is being raced to completion, and this despite the fact that at one time it was thought that the Korean War would lead to the shelving of several major power projects. Probably the final decision to go ahead in 1951 on the Chief Joseph Dam rested on the fact that every kilowatt is high priority in the industrially expanding North-West.

After an autumn of intense activity in 1951 the pace has been maintained through 1952 and work is now well advanced on the second stage of construction at Chief Joseph Dam. This involves the actual building of the dam and of the intake and power-house structures. Total cost of the second stage is in excess of 26,000,000 dollars, and the total expenditure over five years will be 220,000,000 dollars. The first seventeen generating units are due to go into production in August 1956, and four of these will be producing in December 1955. They will turn out 64,000 kilowatts each.

The dam will be a straight gravity, overflow concrete structure 220 ft. high and 1,500 ft. long. The power-house will be constructed on the left bank at an angle to the axis of the dam. The spillway will be 922 ft. long and will have 1,328 ft. of abutment sections. Controlling the flow of the Columbia River over the spillway will be nineteen tainter-type crest gates 40 ft. wide and 38½ ft. high. With the gates fully open, the spillway will pass 1,250,000 cub. ft. of water per second. The approximate power head will be 165 ft. The reservoir to be formed by Chief "Joe" will extend to the tailrace of Grand Coulee Dam, which is 51 miles upstream. The maximum power pool of this reservoir will have an area of 7,150 acres and a total capacity of 480,000 acre-ft.

One element of the design at the Chief Joseph site is of particular interest. This is an earth-fill blanket that will cover the steep right bank of the river just upstream from the dam proper. This is intended to keep water out of a gravel formation that could not be sealed off any other way.

Before construction could start at Chief Joseph, access roads and bridges had to be built and improvements made in the near-by village of Bridgeport. These improvements at Bridgeport were an alternative to building an entirely new Government town. They include forty permanent homes, a sewage disposal system and additional water supply.

The second stage of the enormous contract has involved the placing of concrete at a speed of 6,000 tons a day. Despite low temperatures during November nights in 1951 this work proceeded according to schedule, sometimes even in advance of it. The slogan among the cement workers was "Keep on the highlines until Christmas."

LOOKING ACROSS THE AREA ENCLOSED BY THE COFFERDAM, WITHIN WHICH IS BEING COMPLETED THE NORTHERN SECTION OF THE CHIEF JOSEPH DAM IN WASHINGTON STATE: In the background the Columbia, the greatest power-producing river on the North American continent, roars on, although somewhat impeded by the concrete foundations already planted in the river-bed. 6,000 tons of cement per day are brought to the site on cables, which are slung across the river on towers mounted on lateral railways.

SOLDIERS OF THE AMERICAN SEVENTH DIVISION CARRYING A MACHINE-GUN TO THE TOP OF TRIANGLE HILL, ON THE CENTRAL KOREAN FRONT: The state of complete devastation shown in this picture indicates the severity of the battle which raged about this key position for eight days. The troops were supplied by a cable tramway.

The Struggle for TRIANGLE HILL

A Bitterly-contested Key Position on the Korean Front

After eight days of the most bitter fighting the Communists in Korea broke off their attacks on Triangle Hill and Sniper Ridge, on the central front, last week. The Chinese, after suffering casualties estimated unofficially as 7,500 killed and wounded, showed no immediate intention of renewing the assault.

On one occasion during the battle the Communists drove to within 300 yards of the summit of Triangle Hill, where troops of the United States Seventh Division dug in, supplied by a cable tramway up the southern slope. The "high-water" mark of the enemy drive was attained in the early hours of the morning, when Communists fought hand-to-hand with American infantrymen. With daylight the attack slackened and the Seventh Division troops began to push back down the northern slope.

Throughout the day United Nations fighter-bombers attacked Papasan Mountain to the north, which during the battle for Triangle Hill had been an assembly base for the enemy.

On the slopes of the hill itself American patrols hunted out Communists holed in caves and bunkers. One group of Chinese held the shaft of an old mine at the northern end of the hill. The Americans hurled explosive charges in an attempt to seal the shaft and brought down some rocks. An estimated twelve defenders were killed.

AMERICAN AND KOREAN TROOPS MOVING CAUTIOUSLY UP THE STEEP SOUTHERN SLOPE OF TRIANGLE HILL: "Pike's Peak," a critical outpost on the hill, changed hands several times during the fighting, the Communists bringing up more and more men from the rear to make furious counter-attacks in the see-saw battle.

KOREAN SERVICE CORPS MEN CARRYING A WOUNDED INFANTRYMAN DOWN TO THE FIRST AID STATION AT THE FOOT OF THE HILL: A soldier of the American Seventh Division is leading the way, while another, on his way to the scene of the battle above, pauses to let the stretcher pass.

MOVING A CASUALTY INTO A HELICOPTER, WHICH CARRIED HIM TO HOSPITAL: This picture was taken at the first-aid post at the foot of Triangle Hill. Helicopters are playing a vital part in the battle zones, transporting wounded from the front lines.

THE ART OF AIRLIFTING

In the Berlin Effort Airlifting Achieved World-wide Publicity, but the Technique Actually Goes Back to the First World War; and the First Transport Squadron of the R.A.F. was Formed in 1920

By HAMMOND INNES

(Author of "Air Bridge" and "Campbell's Kingdom")

PLANES WHICH HAVE BEEN USED IN AIRLIFTING AND WHICH HAVE BEEN SPECIALLY DESIGNED FOR THE TECHNIQUE OF AIRLIFTING: The machines seen in the top row have all played their part in the history of airlifts. From left to right are a biplane used in supplying Kut in 1916, a Vickers Victoria (vintage 1929), a C 47 Dakota, used in the Burma campaign, a York (1940), a Globemaster (1950) and an H5 Sikorsky (1950) as used in Korea. The planes shown in the bottom row are a Hannibal, a Blackburn freighter, a Skymaster, a Bristol Freighter and a Bristol helicopter. The Skymaster dominated the Berlin Airlift.

THE word Airlift has become permanently allied in people's minds with Berlin. The Berlin Airlift. It received so much publicity, because it was a peacetime operation, that we are inclined to think of it as the one great aerial lift. Were this the case, the complex organisation required to centre, transport and distribute the supplies, quite apart from the conveyer-belt flight schedule I saw operating at Gatow, could not possibly have been built up in the time.

All techniques are based on the practical foundations of trial and error, and had the Americans and ourselves had little or no previous experience of lifting goods by air, it is very doubtful if anyone would have been fool enough to imagine that we could supply a city of 2,000,000 people with food, fuel and the other necessities.

The history of airlifting goes back to the First World War. I believe the first supply lift was for the relief of the besieged garrison of Kut, in 1916. It sounds absurd now, but over a period of nearly a fortnight R.F.C. and R.N.A.S. aircraft managed to drop a total of 13 tons of supplies—the equivalent of one larger plane-load on the Berlin run thirty-two years later. Even this involved a major effort and casualties, for, using ordinary Service machines with bomb-racks removed and a guide release apparatus substituted, the maximum load was only 150-200 lb. The technique employed for the drop was to enclose the food sack in a second sack to absorb the impact shock.

Development of this facet of aerial warfare, however, was slow. The first bomber-transport squadron of the R.A.F. was formed in 1920 and these dual-purpose machines were of considerable value to overseas commands, supplying troops and evacuating civilians. The parachute drop became standard practice, and a large-scale experimental drop supplied the Chitral Relief Column in 1930. Not until the late '30's did the R.A.F. acquire a transport plane proper. The Hannibal was not a happy choice and the R.A.F. entered the war without a single plane really capable of meeting the supply work it would be called upon to do.

Very little in the way of airlift technique developed in the early stages of the war. Since it was a period of retreat, such lifts as occurred were chiefly of personnel. Airborne operations—the first being the attack on the Tragino aqueduct in Italy early in 1941—were small and involved very little in the way of supply problems.

It was, in fact, in the Far Eastern theatre that the airlift as we know it to-day was slowly and painfully evolved. Not surprisingly, the first big lift was initiated by the Americans. Mentally equipped to surmount any flight terrain difficulties and physically equipped with the sort of aircraft for the job, they faced up to their Number One problem—the supply of the Chinese—with great realism and courage. The road link was gone. It was air or nothing. Colonel Old made the first flight over the Hump in 1942, and following this survey his airmen proved it could be flown by lifting out 13,000 Chinese troops for General Stilwell during the monsoon. Flying that aerial housewife, the Dakota, the Americans were pointing the way for those commanders who could look to the future.

Also not surprisingly, it was the British who initiated and carried out the first land strike of any size to be supplied and maintained from the air. This was Wingate's first Chindit expedition into north-central Burma in the spring of '43.

Though the expedition could hardly be called a success, the cost, like Dieppe, has to be debited to experience. The lessons learned were put to good use later, and not only in the Far Eastern theatre, for the problems he encountered were just those that had to be conquered before the big airborne landings of D-Day and Arnhem could be planned and carried out.

What were these problems? They were less problems of operation than of preparation. The actual flying of the lift—maintenance of personnel and aircraft, methods of flight control, the handling of a large number of aircraft in all conditions of weather—these are the same problems that have to be handled in operating a heavy air strike. The problems peculiar to the airlift are almost wholly problems of ground organisation.

First there is the problem of centring supplies, requiring railheads or good roadheads. A trained ground organisation is needed here to break down the supplies, re-pack, move to the loading aprons and load into the planes on an ordered schedule or on a schedule that experience has proved to be the most useful from the point of view of the needs of the recipients, the type and progress of the operation and their needs as signalled back.

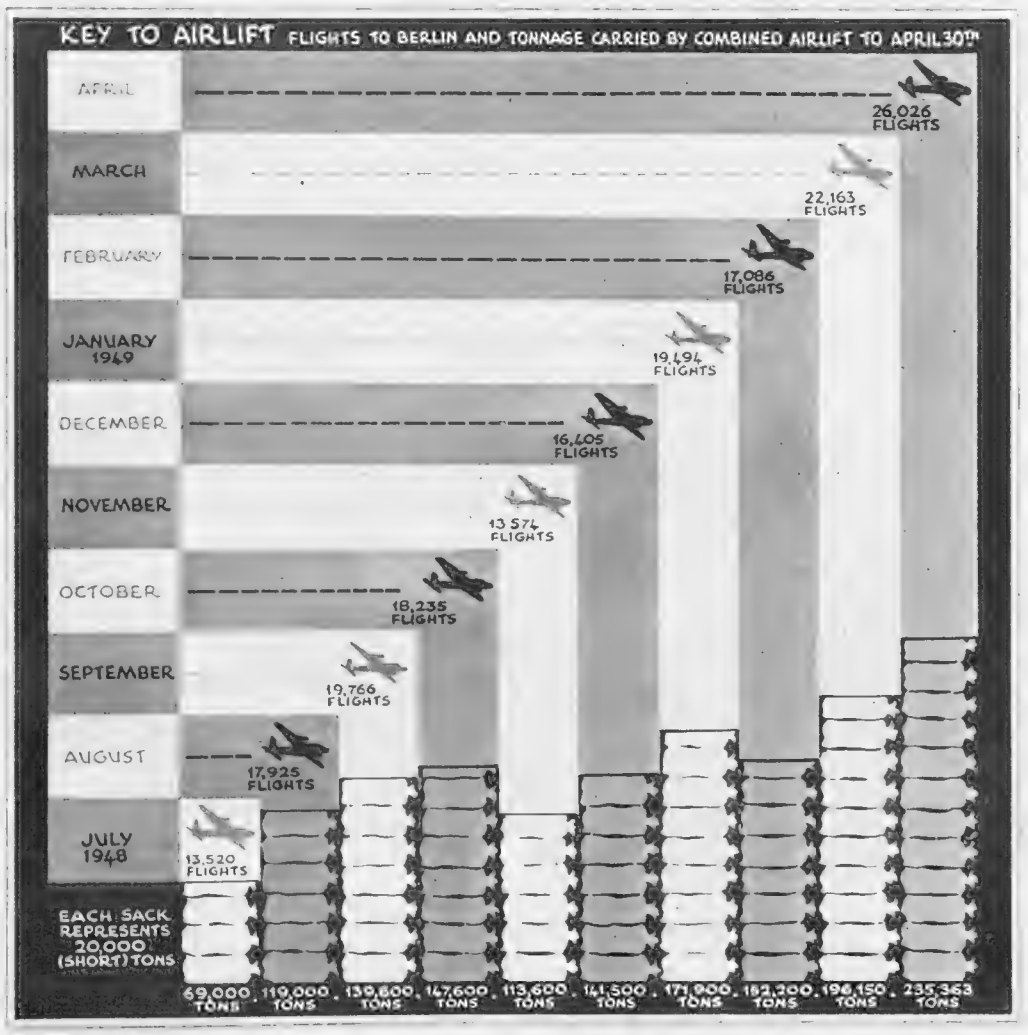
What of the organisation at the other end? Again this must depend on the nature of the operation. But whether it is a drop or a landing, the receiving point must be organised, and in the latter case an airstrip has to be constructed. And when the supplies have been flown in, a supply organisation in reverse has to be in operation to handle and distribute cargoes according to priorities. In an area like the Far East, the whole operation was further complicated by the climate, which necessitated efficient housing of supplies at both ends to avoid wastage.

In ground organisation we were better prepared than the Americans, for back in the days of the retreat from Burma, when 31 Squadron of the R.A.F. and the 2nd Troop Carrier Squadron, U.S.A.A.F., were pioneering air supply, units of the Royal Indian Army Service Corps had been formed into air supply companies, and by 1943 five such companies were in existence.

Wartime lifts developed along two lines—the operational lift and the supply lift. The operational lift was the more complex, for in its purely combat form it was the airborne landing, whilst at the other end of its scope it merged into the stately routine of the supply lift. It required, however, higher morale and a greater urgency, since it was in support of a battlefront and its personnel had to be capable of sudden, sustained efforts.

Whether operational or supply, these lifts were Anglo-American affairs. In fact the whole technique of airlifting has been built up by these two Allies jointly, each learning from the other. The Burma operations in 1945 were on an unprecedented scale. There were about 100 American and British transport squadrons comprising the Combat Cargo Task Force, and from January to March these aircraft lifted a total of 92,000 tons of supplies and 98,000 men.

The ground organisation for the 14th Army was British and it was largely on British initiative that the complex airfield technique of handling and loading was developed. The Army Air Transport Organisation gradually grew into two field organisations—R.A.M.O. and F.A.M.O. (Rear and Forward Airfield Maintenance Organisations). These were the units responsible for the assembly, packing and loading of supplies and their distribution at the receiving end. It was they who set the pattern for the smooth-running organisation of the Berlin lift.



HOW THE BERLIN AIRLIFT GREW: This diagrammatic sketch shows the flights achieved and the tonnages carried between July 1948 and April 1949. In the latter month over 235,000 short tons were carried. United States tonnages are quoted (the short ton being 2,000 lb.), as the United States played such a dominant part in this major post-war transport operation.

The best example of their work in the Burma campaign was at Sinthe. They completed the airfield with its 12 miles of perimeter tracks, unloading aprons and dumps, in ten days. Within a few days of opening, the field was receiving 500 tons of supplies daily and within a week plane-landings had reached 200 daily.

I quote this from Roy McKelvie's book, *The War in Burma*: "The unloading routine was worked out to a fine art. As an aircraft landed it was flagged to its bay. A lorry drove up to the plane's open doorway (many transports flew without doors) and a British checker and eight Indian engineers unloaded the stores and took them to the requisite dump. The operation took only 13 minutes for a 4½-ton load."

That description of the off-loading technique in Burma at the end of the war might well be a description of off-loading at Gatow three years later, except that the Germans with two lorries were unloading 8-9-ton plane cargoes in the same time and the F.A.M.O. had become a F.A.S.O. (Forward Airfield *Supply* Organisation).

In the air, of course, the Americans—and certainly American planes—preponderated. At the peak period, 1945, M.A.T.S., with its Naval equivalent, was operating some 3,500 transports.

(Concluded on following pages)

Biplane, R.F.C. (1916) *Vickers Victoria, 1929* *C 47 Dakota* *Avro York* *Globemaster* *H5 Sikorsky*

THE ART OF AIRLIFTING

KOREA, THE TESTING GROUND FOR THE H 5 SIKORSKY HELICOPTER, THE FLYING WINDMILL, WHICH HAS SNATCHED SO MANY SERIOUSLY WOUNDED FROM THE FRONT LINES AND TAKEN THEM BACK TO BASE: The helicopters have shown great adaptability in the Korean War, reaching spots which would be quite inaccessible to ordinary aircraft. By the use of helicopters and long-distance transport aircraft, it has been found possible to take wounded from the front line and land them in the United States within the space of thirty-six hours. After the helicopters have done their work Douglas Skymasters continue the airlift across the wastes of the Pacific.

A MEMORY OF THE BERLIN AIRLIFT, WHEN BRITISH AND AMERICAN AIR FLEETS FED SOVIET-BLOCKADED BERLIN: In this drawing Patrick Nevin shows R.A.F. personnel directing the landing of aircraft at Gatow, one of the two main airports in the Berlin airlift. Beyond the trees in the distance lies the Russian Sector of Berlin. The airlift was begun on June 26, 1948, and the city was accessible only through three limited corridors in the sky, this adding greatly to the complications of those directing the various landings and take-offs.

(Concluded from previous page)

R.A.F. Transport Command at the same time had 673 aircraft. American Naval transport services were operating 55,000 miles of routes, which gives an indication of the scope of airlift requirement in the Pacific theatre.

All these services, both U.S.A.A.F. and R.A.F., were much curtailed after the war. Nevertheless, both services began moving aircraft and personnel to base airfields in Western Germany with the confidence born of vast experience when the balloon went up in June 1948. On June 24 R.A.F. Transport Command declared the Berlin Airlift open by flying in 6½ tons of supplies for our own troops. Next day M.A.T.S. flew in 80 tons for their troops. From that small beginning the lift grew at a fantastic rate, an Anglo-American demonstration of air power that reached a peak of 1735·6 tons a day carried in 656 plane trips and which had a marked effect on the future course of international politics.

Once again the Americans outnumbered us in the air. But, whilst the disparity was even more noticeable in tonnage carried, for they were operating much larger aircraft, our own organisation handled the bulk of the traffic. At the peak, the British airport of Gatow was coping with a total of over 1,000 plane movements a day and the control technique built up at that airport will be standard for highly concentrated short lifts for many years to come.

I flew the lift at this period to get the background for my novel, *Air Bridge*, and my impressions were chiefly of split-second timing and the soul-destroying monotony of the routine. The aircraft was a cog in a great machine, a unit on the conveyer belt which the Germans so aptly called the "air bridge." Wunstorf in the rain was a great, black, glistening sheet of tarmac ringed with sidings and stacked with aircraft waiting in serried ranks for the take-off. The barracks were a seething, dead-weary dormitory in which there was no night and no day, only the constant getting up and feeding and going to bed of men who ticked off hours flown on their schedule sheets like boys marking off the days to the end of term.

Of the flight itself I was chiefly conscious of the navigator passing on to the pilot the number of seconds he was early or late over each beacon. A latitude of only 45 seconds either side of touch-down time was allowed—outside of that and he was sent back to base with his load. The pattern, both in time and height, was all-important.

First impression of Gatow was one of disappointment. With 500 planes a day landing it was natural to expect the airfield to be chock-full with aircraft. Instead, it was almost empty. As we swung off the runway the next York was landing behind us. Flagged into the off-loading bay, lorries with their German teams were already moving out to meet us. Before I was out of my seat, the doors were open, the first lorry backed up and unloading had begun. R.A.S.C. personnel controlled this operation from a lofty, scaffolded tower. The turn-round varied between 13 and 18 minutes. Hence the scarcity of aircraft. The organisation was so good that there were never more than a handful of planes parked waiting on the unloading apron.

The most astonishing sight I saw was the maintenance of the lift throughout a heavy rain and electrical storm at night. The runway was one-directional. It had to be. And the wind was gusting 56 knots at right-angles across the approach. The storm was so bad that at one point the supervisor in the Control Tower ordered pilots to return to base. But they continued to come in with their loads rather than face the return trip through the storm. Radar ground control approach talked them down on to a runway they could barely see in their spotlights because of the rain. The tricycle

Hannibal *Blackburn Freighter* *Skymaster* *Bristol Freighter* *Bristol Helicopter*

LOADING A SKYMASTER BY MEANS OF A FORK-LIFT TRUCK, AN EXAMPLE OF HIGH-SPEED OPERATIONS ON THE BERLIN AIRLIFT SHOWN IN A DRAWING BY PATRICK NEVIN: By the end of September 1948 the Americans withdrew the Dakotas from the airlift and used the Skymasters almost exclusively, except for a few C 82's which were required to lift difficult loads for which they were especially suitable. The Skymaster can lift 10 short tons (20,000 lb.) as compared with the 3½ tons of the Dakota.

under-carriaged Yorks bounced heavily, but there were no casualties, confirmation of American conclusions that for this work the tricycle undercarriage is to be preferred; though shortly afterwards a wave of Dakotas came in from Lubeck quite smoothly, admittedly piloted by highly experienced men.

Though the most spectacular of the post-war lifts, the Berlin operation was by no means the only one. Since the start of the Korean war, lifts of many and varied kinds have been operated, and our own re-deployment of forces in the Canal Zone was largely aerial. There is no doubt that, both for civil and military purposes, the airlift is and will remain an integral part of an air force's responsibilities.

It is doubtful whether there is much room for improvement in the ground technique, though every operation must inevitably present problems peculiar to itself and there is, therefore, a constant need for elasticity in the organisation. Near-polar operations, such as have been carried out by American air-sea rescue squadrons stationed in Alaska or by our own recent Greenland expedition, are obvious examples.

There is, however, always room for improvements in the types of aircraft used for supply.

For the straightforward lift, the need is for bigger transports. The larger planes have proved more economical in every respect. End-loading is preferable to side-loading. For the operational lift, the problem of landing on small, hastily-built airstrips is paramount, and here that winged skyscraper, the Blackburn and General Aircraft Universal Freighter, with its reversible props and consequent short touchdown-to-standstill requirements, is perhaps our most interesting development. A plane I saw flying at Farnborough this year, which opens up new possibilities in airlifting, was the Bristol 10-12-seat helicopter. The Americans, though well in advance of us in helicopter design for military purposes, have so far done little to develop the transport potentialities of the machine. With our big weight-lifters, such as the Brabazon and the Princess, I don't think we shall be short, in the future, of the right aircraft for the job. But, as in all things aviational, we suffer from a big gap between prototype and production. Chief comment at this year's Air Display was—too much design, too little production.

AN AIRLIFT SOMEWHERE IN CHINA DURING 1943: Troops going aboard transport planes sent from America for the India-China Ferry Command. It was in 1943 that the loss of the Burma Road resulted in an airlift over the hump between Mandalay and Chunking, a distance of nearly 700 miles, which had to be bridged if the Allies were to keep their promises to China. The planes had to fly over the Himalayas at a height of at least 16,000 ft. To fly over the hump the pilots had to find a way round the dense brown nimbo-cumulus clouds

THE ART OF AIRLIFTING:

Some Aspects of the Berlin Lift; Transporting a Dove from the Middle East; the Fairchild Technique

CANNIBALISM IN THE AIR WORLD: A dismantled Dove aircraft being stowed in the hold of a Bristol Freighter at Bagdad. The Dove, owned by a Middle East air operator, was damaged beyond local repair in making a landing at Bagdad Airport, so local engineers put it aboard the capacious Bristol Freighter and dispatched it to Blackbushe, Surrey, where it arrived safely.

TEMPELHOF AIRFIELD DURING THE BERLIN AIRLIFT—A MID-WINTER SCENE TAKEN WHEN THE TEMPERATURE WAS DOWN TO 25 DEGS. FAHRENHEIT: It was inevitable that airlift aircraft should encounter icing during the winter months, but fortunately the icing was never intense and equipment available for de-icing was usually equal to the task. Some of the British civil air cargo aircraft had to be routed at altitudes where intense icing was not likely to be encountered.

AS THE AIRLIFT DEVELOPED IN THE SPRING OF 1949 WORK WENT AHEAD WITH THE PREPARATION OF NEW RUNWAYS: Here bulldozers are seen at work carrying out levelling at the Tegel Airport, in the French Sector of Berlin. The new strip was built to handle the C 97 aircraft, which were capable of flying 20-ton loads into Berlin. At that time it was thought that the airlift might have to be carried on for a very long period.

THE PACK PLANE WITH ITS PACK DETACHED: The Fairchild Packet has been one of the most remarkable innovations in the field of bulk transport. The capacity of the freight hold in the Fairchild C 119 is 2,900 cub. ft. and the plane can carry artillery and towing vehicles at the same time. It has been playing a really notable part in the Korean War.

TEMPELHOF AIRPORT, BERLIN, DURING THE HEIGHT OF THE AIRLIFT: Airport lighting was a big feature of the airlift in the course of which night was almost turned into day and there was little or no let-up in the stream of traffic. To increase the margin of safety during instrument approaches, high-intensity approach lights were installed at all bases. The primary system used by the R.A.F. was a Calvert single row with horizontal cross-bars, employing sodium lights.

SHIPS FOR SALVAGE AND SCRAP

The Sunken Vessel "Vesta" Raised by Floating Cranes; H.M.S. "Formidable" for Breaking-up

On left—

THE 1,500-TON GERMAN MOTOR-VESSEL "VESTA" IS RAISED BY FLOATING CRANES FROM THE NEW WATERWAY, NEAR ROTTERDAM: The *Vesta* sank in the New Waterway, which connects Rotterdam to the North Sea, on September 18, after colliding with the Danish steamer *Otto Petersen* on the previous day. The preparations for raising the *Vesta* took over a month to complete. Pontoons were attached to both sides of the hull, which was then lifted bodily above the surface by four gigantic floating cranes.

THE FOUR GREAT FLOATING CRANES PREPARING TO LIFT THE SUNKEN MOTOR-VESSEL "VESTA": Each crane has a massive block hooked to wire ropes, of immense strength, which pass around the *Vesta*. It was after dark before the struggle was finally won, and the *Vesta* stirred from her muddy bed in the canal.

THE TWELVE-YEAR-OLD AIRCRAFT-CARRIER H.M.S. "FORMIDABLE," WHICH THE ADMIRALTY HAS DECIDED TO SCRAP: H.M.S. *Formidable* was launched in August 1939 and completed towards the end of the following year. She is being scrapped because only complete modernisation would fit her for up-to-date aircraft and this would not be justified. H.M.S. *Formidable* has a distinguished war record. She played an important part in the destruction of the Italian fleet and later in attacks on the Japanese mainland, when she was twice hit by suicide planes. A recent letter in *The Times* from the Archdeacon of Portsmouth called attention to the fact that sightseers often believe H.M.S. *Formidable*, lying at anchor off Ryde, to be still in commission, and suggested that she was therefore a most unfortunate advertisement for the Royal Navy.

THE TWO WATCHMEN ON H.M.S. "FORMIDABLE," A GREAT SHIP WHICH ONCE BOASTED A COMPLEMENT OF 1,600: This "forlorn and shabby hulk," as the aircraft-carrier was recently described, is to be towed from her anchorage off Ryde and handed over to the ship-breakers—the end of a magnificent career.

SAILING DOWN to RIO in the OLD "PAMIR"

THE FAMOUS WINDJAMMER, WHICH WAS BUILT IN THE HAMBURG YARDS IN 1905, IS ONCE AGAIN BESTRIDING THE SEAS, AND PROVIDING TRAINING IN SAIL FOR YOUTHFUL MARINERS

LOOKING ALOFT ON THE "PAMIR" THROUGH THE RATLINES AND THE MAZE OF BUNTLINS AND CLEWLINES OF THE FOREMAST, WITH THE MAINMAST SEEN IN THE BACKGROUND: This picture was taken by Martin Tunstall, author of the accompanying article, during his voyage to Rio de Janeiro in the *Pamir* in the present year. The famous windjammer is now in German ownership.

A GRACIOUS LADY OF THE AGE OF SAIL ONCE AGAIN CUTS A FURROW ACROSS THE ATLANTIC: The *Pamir* with Royals and jib tops'l set when making 4 or 5 knots in a light breeze. During the war the *Pamir* passed from Finnish to New Zealand ownership, being taken as a prize by New Zealand. In 1948 the *Pamir* was handed back to Finland as a gesture of goodwill, and for a while formed part of Edgar Erikson's diminished fleet. Now she has passed into German hands and, flying the colours of the Western German Federal Republic, has been voyaging commercially to South America, largely manned by a force of cadets.

SHIFTING SAILS FOR THE TROPICS: Boys bending an old Royal on the main as the *Pamir* sailed into sunlit waters on her voyage to Rio de Janeiro. A tropical suit is always worn in the "Trades," the best sails being preserved for heavy weather. English cadets have been sailing in *Pamir*, and it is hoped that this fine ship may be linked with an international scheme of training.

No ships are held in greater affection than the Australian grain racers, and it is good to know that several of them are still gracing the High Seas, though gone are the days when the windjammers stormed towards the Horn, with every stitch of canvas set, some of them reaching it less than a month out from Australia, such was their haste to be home and the zest of their masters and their crews in achieving fast passages. To-day these stately survivors of the age of sail, which once knew the rigours of the Cape Horn road, go their ways in more leisurely fashion, among them the "Pamir," which is now in German ownership. In the following article Martin Tunstall, who sailed from Rotterdam to Rio and back this year in the "Pamir," describes some of his experiences on that voyage.

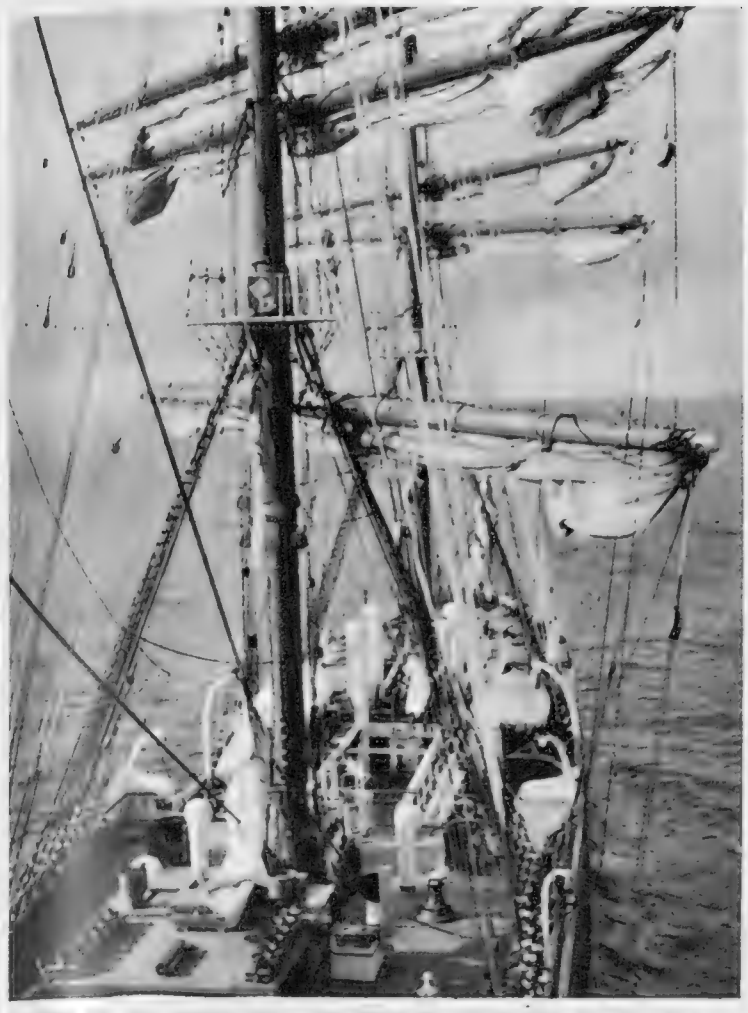
"Oh blow my boys and pull together,
Blow my boys for better weather,
Blow boys, bully boys blow."

THE chanty cheered us as we heaved at the anchor capstan, but the cable came in exasperatingly slowly, although the bars were manned to capacity. The four-mast barque *Pamir* had been bought by a Hamburg firm, and this was her maiden voyage after an extensive refit. It was last January; the *Flying Enterprise* was in difficulties in the Atlantic, and the *Pamir* was trying to ride out the gale, off Margate. Her anchors were not holding. Two lifeboats were standing by to take off the forty-five cadets if necessary. The wind shifted, however, and slipping the remaining anchor, a course was set for the Channel under lower tops'ls and fore.

I was an A.B. in the mate's watch and was aloft as we loosed sail. It was night and still half-a-gale blowing. As the ship rose on a wave and plunged, a wall of white, crunching foam roared out on either bow and the port and starboard lights tinted the crystal carpet red and green. I laughed to think how she had escaped the bone-yard and with a new lease of life was ploughing old tracks towards South America.

Only nine of the ninety on board had been in a windjammer before. During the first few days we just followed the mate like sheep and hauled whatever rope he hauled, quite blindly. Then gradually it dawned that there was a logic in the fifty-odd ropes belayed round each of the masts. We soon learned to sing out at the braces and to heave together and belay without coming up an inch.

Every day a little more canvas was set, until one morning *Pamir* was under full sail. It was a stimulating moment. The eye naturally travelled up the stays to the Royals, where the sun cast a maze of



WAITING TO GET UNDER WAY, AND BOWLING ALONG IN MID-ATLANTIC: *Left*—Sails hanging in the buntlins as the *Pamir*, spick and span, still lay at anchor before the start of her voyage to South America. *Right*—Looking down from the main tops'l yard on to the sunlit waters. This early-morning picture was taken in mid-ocean.

THE LOOK-OUT MAN IS THE EYES OF THE SHIP: He is standing in the bows of *Pamir*, looking along the bowsprit. The nets are typical of German-owned craft. The down hauls for the heads'ls are on the rail near the look-out.

USING THE MAIN CAPSTAN TO HOIST A SPARE ANCHOR FROM THE 'TWEEN DECKS OF THE WINDJAMMER: The sailor seen on the capstan bar on the right is wearing rigging trousers made of Old Cape Horn sails. In the background is one of the cadets sailing in *Pamir*.

shadow patterns on the sails. The straining canvas itself thrust out its curved belly. Tar stood in glistening beads on the ropes; the strands, tried to the utmost, seemed to have their very life's blood squeezed out of them.

To see a "Sailing Lady" in a fresh breeze, under full canvas, is a truly magnificent sight. Witness the scores of ships which altered course to see *Pamir* close to during the voyage, and dipped their flags in homage to one of the very last trading "Deep Watermen." The fact that she flew the colours of Western Germany played no role.

There was work to keep everyone busy. The chipping, red-leading and painting cycle is never-ending when the mate is particular. And then all the sails had to be shifted and the old tropical suit bent on for the "Trades." The best sails are preserved for the heavy weather.

As it grew warmer, those bleak winter nights when the watch on deck huddled together, damp and cold, were soon forgotten. It was forgotten we 'd sworn:

"We 'll go to sea no more—"

We had time to dream of other things than warm fingers and dry sea-boots, and began giving the galley advice, if it was beans for breakfast, as it nearly always was.

Off the Lizard the propeller of the auxiliary broke off. Thenceforth the voyage to Rio was made under sail alone. The weather and the winds took on a new importance, and while every day counted and the "Passage" was an all-absorbing interest, yet time itself stood still. Now our world was just the ship; every man appeared according to his character, there can be no humbugging in the mess deck. Each found an occupation, whether his talents enabled him to make a good model or tell a good yarn; there would always be ready listeners. And there was a concert of chanties and accordion, violin or guitar nearly every evening as we sat around the hatches on deck under the stars.

The voyage out to Rio de Janeiro took forty-seven days. The cargo of cement was unloaded, and from Vitoria, farther up the Brazilian coast, she loaded iron-ore. The ship was forty-five days homeward bound to Rotterdam. *En route* the sailmaker's monkey, Miko, nearly killed the parrot. He was very jealous. When the two pigs were slaughtered and roasted there was a great rejoicing by ship's company, but no consequential storm.

The future of this four-poster is now bound up with that of a fleet of sailing-vessels. Heinz Schliewen fitted out the *Passat* at the same time, and she has made two runs to South America. They should be back in Europe early this month. A few weeks ago he purchased the four-mast barque *Moshulu*, the largest windjammer in existence, and the five-masted schooner *Karl Vinnen*. Till now Schliewen has financed the cadets. They have not had to pay anything at all. Before the war, however, legislation made sailing experience compulsory for all merchant officers. Had this been reintroduced by the German Government, the cadets would have been subsidised and private shipping companies would have contributed to maintain the training ships. But the proposal was defeated. In addition, freights have dropped and firms all over Europe are having to lay up their ships. *Pamir* will probably change hands in the near future. One of the German State Governments, together with a society interested in integrating Europe's youth, may combine resources to maintain her.

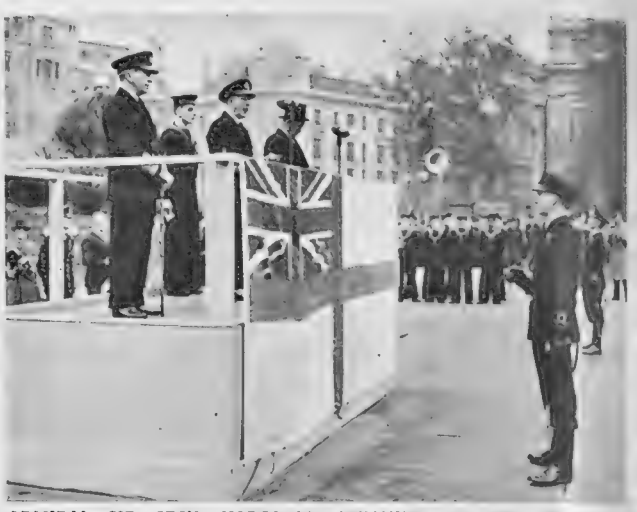
This year the Blue Funnel Line sent eight English cadets in *Pamir* and *Passat*. Fifteen of the German boys spent a month training in Scotland before they joined the ship, and there was an Italian boy. In the original plan both French and Swiss were also to have taken part. Let it be hoped that this training fleet may be preserved. A windjammer has romance enough to make such an international scheme a real success, national differences can be forgotten in the all-absorbing business of sailing her.

Martin Tunstall

TRAFALGAR DAY
IN LONDON AND PORTSMOUTH

Princess Margaret Opens a Block of Flats in Peckham; the Princess Royal in Liverpool; Randolph Turpin Wins on Points at Harringay, and Other Home News in Pictures

THE SCENE AT THE TRAFALGAR DAY CEREMONY IN TRAFALGAR SQUARE AS ADMIRAL SIR CECIL HARCOURT, COMMANDER-IN-CHIEF THE NORE, READ THE ADDRESS TO THE ASSEMBLY: Wreaths were laid at the foot of Nelson's Column by the High Commissioners for Australia, New Zealand, Southern Rhodesia and Canada, the Commissioner-General for Malta, and representatives of Ceylon, Pakistan, India, South Africa, Home Port divisions, the Association of Retired Naval Officers, the Royal Naval Association and The Queen's Own Royal West Kent Regiment. Admiral Harcourt inspected a guard of honour of Kingston Sea Cadets, and Nelson's Prayer was read by Sea Cadet Petty Officer M. de Fortis, of the City of London Unit.



ADMIRAL SIR CECIL HARCOURT SPEAKING AT THE TRAFALGAR DAY CEREMONIES: With him on the platform are Admiral Sir L. Hamilton (left), the Chairman of the Navy League, Sea Cadet Petty Officer M. de Fortis and Mr. H. T. Bishop, who is the General Secretary of the Navy League.

PRINCESS MARGARET PAYS A VISIT TO SOUTH-EAST LONDON TO OPEN A BLOCK OF FLATS FOR OLD PEOPLE: Her Royal Highness is greeted by the Mayor of Camberwell as she arrives at Troy Town, Peckham Rye, to open a £75,000 block of flats built by the Camberwell Housing Society. The block contains fifty-two flats and will house eighty people. Before declaring the new flats open the Princess unveiled a commemorative plaque in Portland stone which had been hurriedly carved by Mr. Angelo del Cauchferta, a 54-year-old Spanish-born sculptor, to replace the damaged original plaque. In her speech at the opening ceremony Princess Margaret said that she was delighted to be back in Camberwell again. "Especially so," she said, "because I am now to open this splendid block of flats, and the provision of comfortable homes for old people is a cause for which I have the greatest sympathy. These lovely flats will go a very long way to giving old people the comfort and security which they long for and which they only can find in a home of their own." The Princess later inspected four of the newly-opened flats and then took tea with sixteen of the old people in their communal dining-room, and cut a celebration cake.

THE DUKE OF EDINBURGH VISITS PORTSMOUTH ON TRAFALGAR DAY TO OPEN A NEW TECHNICAL ANNEXE TO THE MUNICIPAL COLLEGE: The Duke is seen inspecting a Naval guard of honour on his arrival at the port. The annexe, which has cost over £375,000, includes the first catering unit specially to be built in Britain for the training of staff in the catering trade. In his speech at the opening ceremony his Royal Highness said that the College could now train more recruits for industry as well as acting as a centre of research. In the evening of the same day the Duke attended the Trafalgar Commemoration Dinner at the Royal Naval Barracks, Portsmouth.

On left—

RANDOLPH TURPIN DOWNS GEORGE ANGELO OF SOUTH AFRICA IN THE THIRTEENTH ROUND OF THEIR EMPIRE MIDDLEWEIGHT CHAMPIONSHIP FIGHT AT HARRINGAY, NORTH LONDON: This was the first real demonstration of aggression in the fight, and by this time the crowd had begun to give the boxers a slow handclap. Although they admired the skilful evasion of Angelo, his tactics were hardly to their taste, while Turpin in the early rounds displayed nothing of the hunter-killer technique which has made him the terror of the ring. In the last two rounds Turpin's pressure gained in intensity, and eventually he ended up a very easy winner on points. Turpin, it would seem, now stands once again on the threshold of a world championship.

A FRONT VIEW OF THE OLD RECTORY, WIMBLEDON PARK, WHICH IS SOON TO BECOME A HOME FOR OLD PEOPLE : The Old Rectory in Church Road, Wimbledon Park, is acknowledged as one of London's most beautiful ancient houses, and it is claimed to be the oldest in South-west London. It was built in the year 1500 and was visited by Queen Elizabeth when she called on her Minister William Cecil, Lord Burghley. The Old Rectory has been acquired by the Battersea Central Mission from Sir Geoffrey Peto, who made it possible for the Mission to buy the building at a nominal price. Sir Geoffrey Peto, who bought the house in 1947, has left many accessories in the house for use by the Mission. The old people will come from the Battersea area and priority will be given to those in poor circumstances. The house is to be run for the Mission by the Superintendent, the Rev. Thompson.

THE OLD RECTORY, WIMBLEDON—A VIEW FROM THE GARDENS : This magnificent house, which stands in over 4 acres of picturesque gardens, is soon to house thirty old people from the Battersea area. The building is in very good condition and no extensive alteration will be necessary to accommodate the old people. It is hoped that the first of the old folk will be in residence by Christmas or, at the latest, early in the New Year.

THE PRINCESS ROYAL, STANDING ON THE STEPS OF LIVERPOOL CATHEDRAL, TAKES THE SALUTE AT A CHURCH PARADE OF OVER 700 MEMBERS OF THE WOMEN'S ROYAL ARMY CORPS (T.A.) : The parade was the largest muster of the W.R.A.C. yet held in the north-west, and the march-past, which took place in pouring rain, followed a service inside the Cathedral. The Princess Royal, who is Controller Commandant of the W.R.A.C., wore the dress uniform of the Corps. On the day before the parade the Princess took part in the Festival of Consecration of the restored Parish Church of Liverpool, which was destroyed in 1940.

THE PRINCESS ROYAL AND OTHER DIGNITARIES OUTSIDE THE CATHEDRAL : Also in the picture are the Lord Mayor of Liverpool ; Brigadier H. E. Creedon, Commander of the Liverpool Garrison, and Lieut.-Colonel Margaret Hewitt. During her week-end visit to Liverpool the Princess Royal stayed at nearby Croxteth Hall as the guest of Lord and Lady Sefton.

PRINCESS MARIE LOUISE MAKING THE OPENING SPEECH AT THE TRAFALGAR FAIR OF THE BRITISH SAILORS' SOCIETY, IN LONDON : Seated beside the Princess is the present Lord Nelson and Lady Dalrymple-Champneys, O.B.E. The Society, which was formed soon after the Battle of Trafalgar, is the oldest and largest of its kind in the world, and in recognition of its international work, contributions for the Fair came from a large number of foreign Embassies in London.

PREPARING FOR THE FIGHT AGAINST CAMBRIDGE AT THE NEXT BOAT-RACE—OXFORD OARSMEN TRAINING IN "GALLEY" STYLE ON THE ISIS : The centre-board running down the length of this sixteen-oared Leviathan craft enables the coach to walk up and down and give individual instruction and criticism to the oarsmen. In front, stroking the double crews, are (left) J. J. Murray, U.S.A., and B. H. Bolton, Yorkshire.

THE ROYAL VISITORS CROSS THE SARAWAK RIVER IN THE GOVERNOR'S SAMPAN: In this vessel, bright with gilt and white and yellow enamel, the Duchess of Kent and her son, the Duke of Kent, were conveyed across the river from Kuching to Astana, the old palace of the Rajah Brookes. The Duchess and her son slept at the Palace during the period when they were carrying out official functions in Kuching. They arrived in Sarawak in a Sunderland flying-boat of the Royal Air Force, being the first Royal visitors from Britain to tour this youngest colony. The Duchess's tour of South-East Asia has been supremely successful, despite the fact that it has been carried through in conditions of intense heat and, in Malaya, in the midst of much danger. The deep homage paid by some of the old chiefs in Sarawak has been a most touching sight, according to correspondents accompanying the tour.

SARAWAK'S WELCOME

FOR THE DUCHESS OF KENT AND HER SON

Their Visit to Britain's Youngest Colony

THE DUCHESS OF KENT TALKING WITH AN OLD-TIME RANGER FROM SIKITO: This picture was taken during a reception for 300 people at Astana. Many of those whom the Duchess met had played an important part in the resistance movement against the Japanese.

SARAWAK CHIEFTAINS AT A RECEPTION IN KUCHING: *Left*—A Sea Dyak Chief offering a drink of coconut wine to the Duke of Kent during the course of a display of native dancing. *Right*—Tana Weng Agong, the Temongong of the Kenyahs, chanting a tribal song as he placed a Borneo hat on the Duchess of Kent, at the same time offering her a glass of coconut wine. The Temongong wore in his ears the teeth of a clouded leopard, and his regalia included a straw hat shaped like a beehive. For the dance he discarded his black pin-stripe jacket on which was pinned the M.B.E. awarded for his services to Britain in the Japanese occupation.

ON BOARD THE NEW DIESEL TRAWLER "PRINCESS ELIZABETH": This view of the ship shows the electric winch forward of the bridge, which is used for hauling the catch aboard. The ship, which recently underwent trials in the North Sea and then left on her maiden voyage to the White Sea fishing grounds, is the first of two ships for the St. Andrew's Steam Fishing Co., Ltd., of Hull. Built by Cochrane and Sons, Ltd., at Selby Yard, the *Princess Elizabeth* is equipped with the most up-to-date fishing equipment.

A NEW DIESEL TRAWLER RUNS HER TRIALS

Within 24 Hours of Completing Her Sea and Trawl Trials the "Princess Elizabeth" Sails on Her Maiden Voyage to the White Sea Fishing Grounds

Shortly after the pictures shown on this page were taken the new diesel trawler *Princess Elizabeth*, fresh from her sea and trawl trials in the North Sea, set sail on her maiden fishing voyage to the White Sea fishing grounds. This modern diesel trawler is the first of two sister-ships to be delivered to the St. Andrew's Steam Fishing Co., Ltd., of Hull, and the thirty-eighth trawler to be built in Selby for British owners since 1945. She has been built by Cochrane and Sons, Ltd., and incorporates many of the builder's latest designs, including comfortable quarters for the crew of twenty-three, all of whom are berthed either amidships or aft. The principal dimensions of the *Princess Elizabeth* are 160 ft. 6 ins., the ship's registered length, by 29 ft. by 14 ft. 6 ins. She is powered by a Crossley 8-cylinder diesel of 1,500 b.h.p. and is fitted with a fully insulated fishroom. The most up-to-date navigational equipment has been installed in the *Princess Elizabeth*, in addition to Marconi wireless, radar and echo-sounding gear. The radar equipment includes the Radiolocator IV, which records all above-water objects within a range of forty miles, and a Lodestone direction indicator for obtaining bearings on other ships of the fleet. For the benefit of the fishermen there is the Seagraph echometer, which provides a contour graph of the sea-bed beneath the vessel. In addition to the Seagraph, there is the Fischlupe, the cathode ray tube of which indicates the presence of fish in the vicinity of the trawler and gauges their depth. A focusing device, also fitted to this instrument, enables the operator to record a "close-up" of any given section of the water.

"PRINCESS ELIZABETH," FRESH FROM HER NORTH SEA TRIALS, HEADS FOR HER FIRST TRAWLING MISSION AT THE WHITE SEA FISHING GROUNDS: This view of the new trawler gives some idea of the ship's graceful lines.

TESTING THE WINCHES AND OTHER VITAL GEAR DURING A PRACTICE TRAWL IN THE NORTH SEA: These two pictures show, *on left*, the nets as they were hauled aboard the trawler after the test, and *on right*, the nets as they were lowered overboard at the start of the trawl. The *Princess Elizabeth* has a crew of twenty-three.

AN ORNATE WASHSTAND DESIGNED BY THE VICTORIAN ARCHITECT WILLIAM BURGES, WHICH IS INCLUDED IN THE CENTENARY EXHIBITION AT THE VICTORIA AND ALBERT MUSEUM: Designed for Burges's house in Melbury Road, Kensington, this washstand has a castellated cistern, a marble tip-up basin inlaid with gold and silver fish, and a tap in the form of a bronze monster. The examples of Burges's work are the most startling pieces of furniture in the exhibition.

THE "GOLDEN BED" OF WILLIAM BURGES IN THE CENTENARY EXHIBITION AT THE VICTORIA AND ALBERT MUSEUM: This monumental piece, painted in gold, was designed for the guest room of the architect's house in Melbury Road, Kensington. It is ornamented with mottoes, crystal balls and insets of textiles. The head is inset with two large and ten small mirrors and a painting of the medieval version of the famous "Judgment of Paris."

AN EXHIBITION OF VICTORIAN AND EDWARDIAN DECORATIVE ARTS TO COMMEMORATE THE CENTENARY OF THE

VICTORIA AND ALBERT MUSEUM

The exhibition of Victorian and Edwardian decorative arts, opened at the Victoria and Albert Museum last week by the Minister of Education, the Rt. Hon. Florence Horsbrugh, is being held to commemorate the centenary of the opening at Marlborough House in 1852 of the Museum of Ornamental Art, which was set up at the express command of Prince Albert, with objects purchased at the Great Exhibition during the previous year. It may be regarded as the direct ancestor of the Victoria and Albert, for in 1857 it was moved to the present site, with the name of the South Kensington Museum changed to its present designation in 1899.

The exhibition attempts for the first time to assemble the surviving work of the leading Victorian and Edwardian designers. For the past forty years this period was so much out of fashion that many of them were completely forgotten, and their work was entirely lost sight of. The task of collecting the material was therefore a formidable one, and engaged a team of six research workers for more than a year. In the absence of any serious books on the subject these workers had to rely on following up chance bits of information in old periodicals and catalogues. The tracing of present ownership was usually a forlorn task in the case of commoners, but a careful study of Debrett and Burke made it more fruitful in the case of titled owners, whose descendants could be traced. In many cases the search led to the discovery of objects, the interest of which was entirely unknown to their possessors, who had inherited them with no idea of their value or history.

In the search for material considerable use was made of the Press, broadcasting and television, and some remarkable "finds" resulted. The exhibition remains open until January 18.

SIR AMBROSE HEAL'S SUPERB INLAID WARDROBE: This piece won a Grand Prix at Paris in 1900 and at Glasgow in 1901. It was lost sight of for about fifty years.

A MAHOGANY CABINET WITH FLORAL INTARSIA DECORATION WHICH WAS MADE BY J. P. WHITE ABOUT 1910: This beautiful cabinet was designed by M. H. Baillie-Scott.

TWO VERY UNUSUAL CHAIRS INCLUDED IN THE EXHIBITION OF VICTORIAN AND EDWARDIAN DECORATIVE ARTS: *On left*—An oak chair with upholstered seat. It stands nearly 5 ft. high. *On right*—A child's chair in oak, inlaid with pewter, ivory and mother-of-pearl. This is another example of the work of Sir Ambrose Heal.

TWO ECCLESIASTICAL PIECES AT THE EXHIBITION. *On left*—A magnificent reliquary coffer, set with semi-precious stones, loaned by St. George's Cathedral, Southwark. *On right*—A silver monstrance, set with jewels and enamels, which was originally designed by Henry Wilson for the remote Abbey on Caldey Island, off the coast of Pembrokeshire, South Wales. It is now in the possession of Prinknash Abbey, near Gloucester.

ANOTHER OF THE STRIKING EXHIBITS BY WILLIAM BURGES: This gigantic and highly ornate bookcase has painted panels by fourteen artists who were the friends of Burges. Also designed by Burges is a silver-mounted flagon incrusted with precious stones, with the handle in the form of a monster.

A CABI[NET] DESIGNED BY GEORGE JACK, 1888: It is inlaid with a design of oa[k] leaves and acorns. The exhibition includes several loans from abroad, an[d] three of the most interesting pieces were sent by the Queen.

THE "POMONA" OF BURNE-JONES, PROBABLY THE MOST AMBITIOUS EMBROIDERY CARRIED OUT IN THIS COUNTRY IN THE LAST 150 YEARS: The "Pomona" is executed in silk embroidery and is a hitherto unknown companion-piece to the celebrated "Flora" tapestry, which also appears at the exhibition.

THE FIRST HARPSICHORD TO BE MADE BY THE LATE ARNOLD DOLMETSCH, THE GREAT HASLEMERE INSTRUMENT BUILDER: The harpsichord has brass fittings and is covered with paintings by three artists.

On right—

A GRAND PIANO BY SIR ROBERT LORIMER, THE ARCHITECT OF THE SCOTTISH NATIONAL WAR MEMORIAL: It was painted on by Mrs. Phœbe Traquair, a Scottish artist, with scenes from the "Song of Solomon."

MOTOR SHOW ASSESSMENTS

The Humble Motorist has this Year Found Himself Suffering from a New Kind of Frustration, the Inability to Pay the Price

BY "THE SPHERE" MOTORING CORRESPONDENT

WITH the 1952 Motor Show almost at an end, it is possible to sort out—not without difficulty, after a spate of Show parties!—some of the impressions received after spending many hours at Earl's Court and walking what seemed like miles around the stands and along the galleries.

The new cars created enormous interest; Show visitors have been impressed by the detail refinements to 1952 models; the special coachwork has been greatly admired; and a number of technical novelties have been studied with enthusiasm.

And visitors to Earl's Court really got the impression, this time, that unless they were very careful the newly-revived enthusiasm of the eager young salesmen on the various stands would prevent their leaving the Show before ordering two or three different cars!

Unfortunately, the humble motorist who went to this year's Show to feast his eyes on the new Sapphire, Super Snipe and Wolseley, and to gaze longingly at all the other glittering products of our lively motor industry, found himself suffering from a new kind of frustration.

Last year the seller's market had shown little sign of waning and delivery dates for new cars quoted on most of the stands were still fantastically distant. Now that even the popular cars are not so difficult to obtain the Average Motorist is beginning to realise that he cannot now afford one, thanks to the continuance of double purchase tax and the fact that he cannot get so much for his present car, in the used-car market, as he had hoped.

New models of which I have been unable to write in earlier references to the Show include the low-price 2.6-litre Frazer-Nash, powered by the 90 b.h.p. engine which was used in the Austin A90, a lively sports model which is now no longer in production. It is a 4-cylinder, 2,660-cc. engine with overhead valves operated by push-rods.

The new Frazer-Nash has a four-speed gear-box, with steering-column gear-change lever, and it uses the normal Frazer-Nash chassis. It is primarily a two-seater—though a second passenger could be squeezed in if desired—and has a hood which is detachable and which can be stowed in the back of the car, where there is a useful amount of space for luggage. Basic price of this new car is £1,500, plus £834 purchase tax.

Another new sports car which is to use the Austin A90 engine is the Healey Hundred, which at a list price of £850, plus £473 tax, is claimed to be the cheapest 100 m.p.h. car.

It has an electrical "overdrive" gear which comes into operation automatically at 50 m.p.h. or can be brought into use by a hand control.

You do not need to be very technically-minded to understand the importance of the new semi-automatic transmission systems, of British design, and the examples of the new disc-type brakes that are on view at Earl's Court. It may be that British cars—the smaller models, at any rate—will never be fitted with the fully automatic transmissions, with fluid couplings, such as are now extensively used on American cars. One of the experts who think we must have them sooner or later is Mr. Henry Spurrier, President of the Society of Motor Manufacturers. He stated recently that he thinks we must develop automatic transmissions if Britain is to maintain her place in overseas markets where American cars may be setting a fashion for hydraulic drives which dispense with the orthodox gear-box.

His argument was that motorists in such markets may not, at some future date, be willing to buy British cars not equipped with fully automatic transmissions, however excellent they might be in all other respects.

I imagine that many car-designers in Britain are inclined to disagree with Mr. Spurrier on this point at present, while maintaining an open mind in case further technical developments change the picture. For one thing, automatic transmissions add to production costs, and they also increase the running costs of a car by reason of the fact that some of the engine's power output is lost through inevitable "slip" in the fluid drive.

This slight waste of power makes less difference to the performance of the average American car, with its big engine, than to the smaller British units. And whereas motorists in the U.S. have been brought up to accept a relatively high fuel consumption, the low running costs of British cars have always been an attractive sales point in foreign markets.

For these reasons British research has concentrated more on the development of semi-automatic drives, which make use of a gear-box, but which eliminate the need for a clutch and which provide two-pedal control (accelerator and foot-brake). Excellent examples of this method, which have created great interest at Earl's Court, are the Manumatic system, developed by Automative Products, Ltd., and the Hobbs gear-box.

With the Manumatic system the decision when to change gear is left with the driver. All he has to do is to move the steering-column lever. After starting the car in neutral he moves the lever to the first-gear position and opens the throttle. Whenever he wants to change gear, up or down, he moves the gear-lever and the Manumatic clutch control does the rest.

This is not the place to describe exactly what happens to produce this two-pedal control. I will content myself with saying that moving the gear-lever actuates an electric solenoid. This opens a valve controlling a vacuum servo cylinder, which frees the clutch and causes the gear to be engaged noiselessly. When the throttle pedal is depressed the clutch is engaged and the drive is taken up progressively with the help of bob weights attached to the clutch and controlled by centrifugal force.

THE BISECTED AUSTIN A30 "SEVEN" SALOON AT STAND NO. 157 AT THE MOTOR SHOW: The halves, actuated by two worm drives at 12-second intervals, open wide to show the internal construction of the car. The Austin Seven, a four-door fixed-head saloon, which costs £355, plus £198 purchase tax, is fitted with a high efficiency o.h.v. engine capable of speeds of over 60 m.p.h., with up to 50 m.p.g.

The Hobbs gear-box goes a step further on the road towards the complete elimination of clutch pedal and gears. It employs an epicyclic gear train which is controlled by two hydraulically-operated friction clutches and three brakes. You start the engine with the steering-column gear lever set at neutral, and then, to move off, you move the lever to the "drive" position and press the accelerator pedal.

If the car is on a steep up-gradient you set the lever at "low." The gear-change quadrant has only one other position: reverse. When the driver wants to stop he merely takes his foot off the throttle and steps on the brake. To move off again he simply depresses the accelerator. If the gear-lever is in the "drive" position the car will go off in second gear. If it is in the "low" position the first (or lowest) gear is used. In either case the car changes up into the higher gears automatically, by self-generated hydraulic power; and down again when its speed decreases on a hill or in traffic.

Will these devices, or something like them, give the answer to the question of automatic transmissions for British cars? Time alone will tell. Meanwhile, Daimler and Lanchester remain faithful to their well-proved fluid flywheel and pre-selector gear-box (which needs a clutch pedal), while Armstrong-Siddeley Motors offer their new 3.4-litre 95-m.p.h. Sapphire, with either a dry-plate clutch and four-speed synchromesh gear-box or an automatic centrifugal clutch and pre-selector box. These alternative forms of transmission have been available on the 2.3-litre Armstrong-Siddeley models, but now, for the first time, the pre-selector box is operated electrically.

Although not a British development, the fully automatic transmission system adopted for the left-hand drive export models of all Rolls-Royce and Bentley models except the Bentley Continental aroused great interest during the Show.

After years of study, Rolls-Royce engineers came to the conclusion that the Hydramatic automatic gear-box developed by General Motors in America and used on a number of different makes of American cars, in addition to the G.M. products, came very close to what they considered the ideal transmission system for Rolls-Royce and Bentley cars.

It was decided that with the Hydramatic system available it would not be worth while evolving one of their own at the present time, when the demand for an automatic transmission was already insistent among potential customers abroad.

Buyers can choose between the ordinary four-speed gear-box or the Hydramatic system, which also has four gears but which dispenses with both a clutch pedal and the ordinary type of gear-change lever. It uses a fluid coupling and epicyclic gear-trains, but it also has a manual control lever with which the driver can select any gear and override the automatic mechanism.

A transmission feature which seems to be gaining ground in Britain, though very slowly, is the overdrive gear, which is popular on American cars as a fully automatic feature. It is simply an extra gear, with a ratio higher than the normal "direct drive" top gear, which is engaged when the car is travelling reasonably quickly, and which is intended to reduce petrol consumption, wear and engine noise by lowering the engine revs. for a given speed.

In addition to the new Healey Hundred, British cars now fitted with an overdrive as standard equipment include the 3-litre Daimler coupé and the 4-litre Jensen Interceptor. The latter uses the ingenious Laycock de Normanville unit, which is available on the Standard Vanguard as an optional extra.

Disc brakes have been displayed by both the Girling and Lockheed companies. They are not fitted to any of the British production models on view at Earl's Court, but they have reached a stage of development which makes it reasonable to forecast that they will be seen on some of the bigger production models in the 1953 Show.

The Girling Company alone has carried out more than 100,000 miles of road tests with disc brakes of different kinds fitted to a variety of cars. The model they have on view at Earl's Court is called the Hydrastatic Disc Brake, and it incorporates patents licensed from the Dunlop Rubber Company.

It is a flat metal disc, attached to the wheel and revolving with it, in place of the normal brake drum. Friction pads are pressed against them by hydraulically-operated calipers. Their anti-fade and self-adjusting qualities make them greatly superior to the drum brake, and there is the added advantage that they effect a saving in weight of up to 20 per cent.

And now a word about the products of a firm—Vauxhall Motors—which, although they do not rank as "new," have, in fact, undergone a major change since the last Show. The 1½-litre, 4-cylinder Wyvern and the 2¼-litre, 6-cylinder Velox have, since the 1951 exhibition, been given "over square" engines, with the bore measuring more than the stroke, and so giving more power for less wear and a lower fuel consumption.

The R.A.C. recently observed an interesting speed and petrol consumption test with a Wyvern and a Velox picked at random from the firm's assembly line at Luton. On a run from London to Brighton and back (104½ miles) the Wyvern averaged 30.51 m.p.h. and 33.46 m.p.g., and the Velox 30.81 m.p.h. and 31.56 m.p.g.

And now, in this third Motor Show review, I make no apology for referring to a new British car that is not in the Show at all. For the A.C. Petite is a three-wheeler, and can only be exhibited at the Motor Cycle Show, which takes place at Earl's Court next month.

In breaking into the "baby" car market A.C. Cars, Ltd., are reviving an A.C. three-wheeler tradition that was broken at the beginning of the First World War.

The Petite has the single wheel at the front and the 3½-h.p. Villiers two-stroke engine, with triple belt drive to the gear-box and final chain drive, is mounted at the rear. List price is £255, increased by purchase tax to £398 10s.

It is a two-seater saloon—though there is room on the bench-type seat for an adult and two children—and the sunshine "roof" is of the canvas, roll-back variety. Top speed is 40 m.p.h., and the petrol consumption is between 60 and 70 miles to the gallon.

Equipment includes a self-starter, electric wiper and horn, three-speed gear-box (with reverse), steering-column gear-change lever, pistol-grip handbrake on the dash, double-dipping headlamps, separate side lights and big-car foot controls.

Mr. William Hurlock, managing director of A.C. Cars, tells me he hopes to be turning out forty Petites a week by next spring.

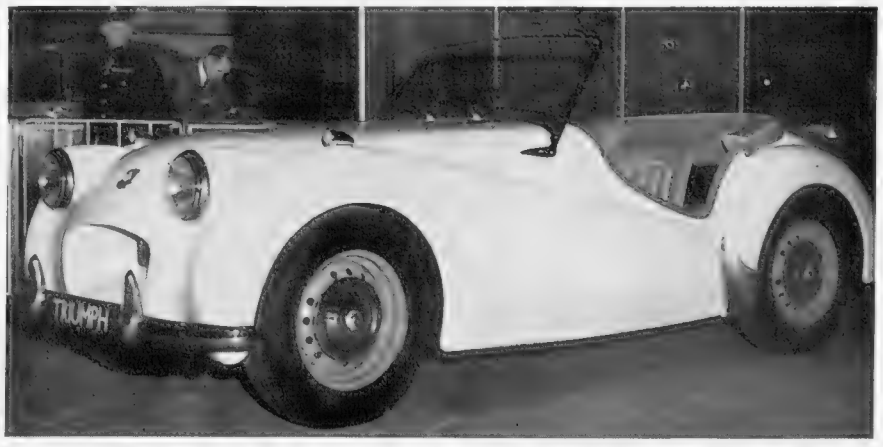
PART OF THE MIGHTY THRONG AT EARL'S COURT ON THE OPENING DAY: In the foreground, tilted so that it can be more readily seen and admired and with a bank of flowers behind it, is the new Jaguar—the sleek, expensive-looking car which has won 24,000,000 dollars worth of orders from America for 1953, as compared with 10,000,000 dollars worth in the current year. Buyers from home and overseas stormed Earl's Court on the opening day, when the attendance was 23,360. It was noted, however, that the home buyers were intent on getting good prices for their old cars before they would commit themselves to one of the sleek new models.

E CAR WITH A HYDRAULIC-OPERATED BONNET: This is the Monte Carlo Saloon Allard, one of the handsomest touring cars in the Motor Show. Allard are also showing their Safari Estate Car and their Le Mans competition two-seater.

THE MOTOR SHOW BREAKS THE ATTENDANCE RECORD

23,360 People Flocked to Earl's Court on the Opening Day, with Both Home and Overseas Buyers Well to the Fore

ONE OF THE HIGHLIGHTS AT EARL'S COURT: The British motor-car designer and manufacturer Donald Healey seen at the wheel of his new sports car—claimed to be the cheapest 100-m.p.h. car ever built—during his recent visit to Belgium. Cruising at 35 miles to the gallon, the new Healey is powered by an ordinary Austin A90 engine of 2·6 litres. This Healey Hundred at its first attempt smashed the Belgian national 3-litre Class D record, covering the kilometre at 111·73 m.p.h., on the Jabberke road, near Ostend. The secret of the high speed and low fuel consumption is the electrically-controlled overdrive, which comes in automatically (or by hand switch) when travelling at over 50 m.p.h. It has now been agreed that Austin's will work with Healey's in producing the car, and from now on it will be called the Austin-Healey-Hundred.



TWO SPORTS CARS WITH A POWERFUL APPEAL: *Left*—A.C. Cars' new 2-litre Sports Tourer. This car gives full accommodation for five passengers. Left-hand drive can be fitted if required. *Right*—The new Triumph Sports Car which won much admiring attention at Earl's Court, including orders from Bogota, British Colombia.

ROYAL OCCASIONS

In RURAL WALES and LONDON

The Queen, Accompanied by the Duke of Edinburgh, Opens the Claerwen Dam; The Queen Mother and Princess Margaret Attend Lord Ogilvy's Wedding

THE QUEEN IN WALES—HER MAJESTY OPENS THE £2,000,000 CLAERWEN DAM IN THE ELAN VALLEY, RADNORSHIRE: Walking with the Queen as she leaves the valve house is the Lord Mayor of Birmingham, Alderman W. T. Bowen, while the Duke of Edinburgh is accompanied by the Lady Mayoress and the Lord Lieutenant of Breconshire, Major G. T. Baikes. A few moments before this picture was taken the Royal party had walked down the 312 steps of the gallery which runs inside the dam and serves the dual purpose of taking away any seepage water and providing the engineers with an opportunity of observing the dam's internal behaviour. The descent had been made from the top of the dam, where the Queen had walked to the western end of the parapet. In her speech at the ceremony the Queen said that the opening of the new reservoir marked the completion of water undertakings inaugurated fifty years ago by her great-grandfather, King Edward VII. The new Claerwen dam, part of the series of Welsh reservoirs which provide water for Birmingham, and the largest of its kind in the country, is 184 ft. high and 1,166 ft. long. One point which the Queen noted in her speech was that the natural beauty of the countryside had not been impaired by the construction of the dam.

THE CLAERWEN DAM IN OPERATION: The water is seen as it surged up through the valves. A vast crowd of people greeted the Queen as she arrived for the ceremony and later as she left on a tour of other Welsh towns and villages.

LORD OGILVY, ELDEST SON OF THE EARL AND COUNTESS OF AIRLIE, MARRIES MISS VIRGINIA RYAN, DAUGHTER OF MR. AND MRS. JOHN RYAN OF NEWPORT, RHODE ISLAND, U.S.A.: Accompanied by the six bridesmaids and escorted by kilted pipers, the bride and bridegroom leave St. Margaret's Church, Westminster, after their marriage, which was solemnised in the presence of Queen Elizabeth, the Queen Mother, Princess Margaret, the Duke and Duchess of Gloucester and other members of the Royal Family. Holding the bride's train is Mark Tennant, a nephew of the bridegroom. The bride, who was given away by her father, wore a gown of ivory satin with a tight-fitting bodice and low neckline, long sleeves and a full skirt falling into a long train. Her laced tulle veil was held in place with an ivory satin Juliet cap. The adult bridesmaids, Miss Elizabeth Carew-Pole and Miss Romana von Hofmannsthal, wore dresses of white tulle and water-silk, while the child bridesmaids, Davina Lloyd, niece of Lord Ogilvy, Arabella von Hofmannsthal, Juliet Harvey and Caroline Little, had dresses of white tulle with Ogilvy tartan sashes. The best man was the Hon. Angus Ogilvy, brother of the bridegroom, and the service was conducted by Canon Charles Smyth.

LORD OGILVY AND HIS BRIDE AT NORTHOLT AIRPORT: They were about to leave for their honeymoon in Paris and America. About 1,000 guests, including many Americans who had flown over for the occasion, attended the wedding.

On right—

THE ROYAL GUESTS LEAVE ST. MARGARET'S CHURCH AFTER THE WEDDING: Queen Elizabeth, the Queen Mother, walks with the Earl of Airlie, father of the bridegroom, while Princess Margaret walks with Mr. John Ryan, father of the bride.

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The World of Books—By VERNON FANE

A WEEK OF NEW NOVELS

The Autumn Publishing Season Gets Under Way with a Spate of New Novels by Distinguished Authors, Including Doris Lessing, R. C. Hutchinson, and Neil Gunn

NOVELS by distinguished authors, novels by new authors, novels by Welsh, German, Italian and American authors continue to come in, and what greater sign could one have of the current vitality of literature in general and fiction in particular?

Miss Doris Lessing is one of the most interesting of young authors, and I firmly believe that her name is well on its way up to the top ranks of novelists where the ability to tell a story and the command of excellent English are essential passwords. MARTHA QUEST (Michael Joseph. 12s. 6d.), her new novel, is announced as the first of a trilogy about the progress and development of a girl, born in Africa of English parents, in our times. Even without the announcement one would have guessed Miss Lessing's plan for the story, since the present book starts with a great deal too much force and impetus to be confined within 300 pages. Indeed, I look forward to the second part very actively, and am inclined to wish that it had been one of those three-volume novels through which one could read one's way in one's own time—and not the author's.

RECOLLECTIONS OF A JOURNEY (Cassell. 15s.) is, amongst other things, one of the finest exercises in objectivity that I have read for a long, long time. Mr. R. C. Hutchinson is, as we know, a major novelist who has not had to rely on a vast spate of books to establish his reputation. Whether you like it or not, he writes very well indeed, and "whether you like it or not" applies directly to this novel, which is one of the most unhappy, the most tragic of themes about which one would perhaps prefer to read no more in one's cowardly way, but about which Mr. Hutchinson quite simply compels one's attention. In 1940 hundreds of thousands of Poles were herded and driven like cattle into Siberia to live under forced labour conditions, and two years later 90,000 of them arrived on the northern border of Persia, where they were looked after by a small party of British and Indian soldiers. Mr. Hutchinson writes of the fate of one Polish family in this huge tragedy, as seen through the eyes of one of the young wives, who, almost without comment, describes the seemingly endless journey, and her own journey in love and comprehension.

COMMEMORATING THE FIFTIETH ANNIVERSARY OF THE DEATH OF EMILE ZOLA: President Vincent Auriol receives members of Emile Zola's family at the Elysee Palace and is presented with a medal engraved with a portrait of the author. From left to right are M. Jean Leblond, nephew of Emile Zola; Madame Day; Dr. François Emile-Zola; the President of the French Republic, and M. Pierre Descaves, President of the Société des Gens de lettres, who presented the members of the family to M. Auriol.

DONKEY BOY (Macdonald. 12s. 6d.) is a further volume of Edwardian suburban history from the indefatigable pen of Mr. Henry Williamson, who has turned with a will from the life stories of otters to the infinitely detailed life stories of the great English middle class. In the present novel the boy in question is a child whose life has been saved in babyhood by drinking ass's milk, and who has consequently been given this detested nickname, and who lives to enjoy, or, at any rate, to experience the thrills of motoring (by Panhard and Levassor) in Kent, flying a big box-kite on the hill near Crystal Palace, and seeing the crowds on Mafeking Day. I should say that there was very little doubt that this book, which takes the boy's history only to his eleventh year, would be supplemented by a succession of others in which not only the boy's life, but English social history of the period would be graphically treated.

Mr. D. L. Murray deals with the Edwardian period, too, in OUTRAGEOUS FORTUNE (Hodder and Stoughton. 15s.), a lively production which not only gives a picture of racing life in the first decade of this century, but is in itself a pastiche of the books of the period with its drawn chapter headings, unashamed dramatics and ungraduated distinctions between black and white. One can read it, in fact, with considerable enjoyment and with considerable interest in the author's researches into Edwardian Turf matters, gambling and musical comedies, but without believing in a single one of its characters.

MASTER JIM PROBITY (Hutchinson. 12s. 6d.) is Mr. Frank Swinnerton's new novel, and gives one the impression of having been written with the gusto and enjoyment (and possibly more) of a young author with only a published page or two to his credit, instead of by one of our established novelists: a heartening circumstance, and one that gives the book its particular flavour. This is the story of a hypocrite; not on the grand or political scale, but on the small, domestic scale, and the story is viewed only through the hypocrite's eyes or, as it were, between his blinkers, which allow him to see himself as a man of integrity and sincerity, instead of as the world sees him.

TOM TIDDLER'S GROUND (Heinemann. 12s. 6d.) is quieter, more reflective stuff; a story of the Scottish Highlands and of the feyness and violence that we learn through literature are endemic to them. Mary Dunstan writes her story of old wrongs and new revenges with an authority that one must respect, even if the tale of Scots sensibility versus English materialism is more dissonant to the ear than she intended. However, the scene itself is represented with a poetic directness, and the book makes its own niche in the memory.

Mr. Louis Golding's new novel, THE LOVING BROTHERS (Hutchinson. 15s.), is an examination of the criminal tendency as exposed through the brother of a rightly respected Oxford don, and another, the brother of a young Oxford scholar. Each crook has his family version of the reverse of the medal, and each is curiously involved with them through affection. Mr. Golding makes the expansive best of his subject and has written a book that loses nothing through restraint.

BLOOD HUNT (Faber. 15s.) is a novel of the Highlands again, but on a less temperamental plane. Mr. Neil Gunn writes of a sailor who lives retired from the sea in a remote cottage with a barn, a temperamental cow, a few books, a few pounds of money, and latterly a young friend who is wanted for murder. The old man helps the younger, since his instinct, rather than his sense of justice, goes against the hounding of a man, and it is only at the very end that an older, more ruthless form of justice takes over. An impressive story and, oddly enough, not without its humour.

Mr. E. P. B. Linstead's novel, AWKWARD FOR JOSEPH (Bodley Head. 12s. 6d.), deals with the theme of boredom (if I am not mistaken) in a way that it is a good deal too successful. His hero is a private soldier who, during the last war, develops a toe joint that obligingly and actually swells up when there is any threat of active duty. Consequently he is posted to a salvage dump near Maidenhead, where the activity is *nil* and the chance of examining local types never-ending. There are some sly laughs in this novel, but, on the whole, I found the prevailing weather of damp mist and lethargy rather over-powering.

HEAVEN PAYS NO DIVIDENDS (Jarrolds. 12s. 6d.) is the work of a modern German novelist, Richard Kaufmann, and it has been translated from the original by Eric Mosbacher. This is a tale of the last war as told from the other side, and will have its value in that for unprejudiced readers, and for students of literary form, in the fact that its style is dry and not loaded with too-familiar sentiment.

There is no end, it seems, to the zest with which Mr. Jack Jones composes and writes his novels, a glorious blend of indignation and humour and sentiment. The latest is LUCKY LEAR (Hamish Hamilton. 10s. 6d.), with a background of coalmines in South Wales and a principal protagonist in an owner who gives up his mines to the Coal Board with a fairly good grace, turns his enormous house into a hospital, finds time to take a couple of slaps at the Labour Government and to get married again. Good, unsubtle reading.

THE FRONTIERS (Gollancz. 10s. 6d.) is a novel that has had an interrupted career. It was written by Mr. John Strachey in 1941 when he was adjutant of a squadron in Fighter Command, and, since it concerned in part the escape of a pilot from France during the war years, it was thought at the time of its writing to be too near to the actual truth of such exploits to be safe. Even after ten years or more the novel reads well and, in a preface, the author tells us that his views and his fundamental objections to the totalitarian world outlook and to Communism have remained unchanged.

A SHORT LIST OF NEW PUBLICATIONS

ADLAI STEVENSON (W. H. Allen. 15s.), *Portrait of a Democrat, by Noel F. Busch, is described as "the first biography of the virtually unknown politician who dramatically became Democratic nominee for President of the U.S.A."*

Alexis Lichine, a wine-grower and exporter of repute, has written in collaboration with William E. Massee, **WINES OF FRANCE** (Cassell. 21s.).

The story of the **OPEN GOLF CHAMPIONSHIP** (1860-1950) (Jarrolds. 16s.) *is recorded by Charles G. Mortimer and Fred Pignon. There are 20 photographs and 10 maps.*

THE WORLD'S GREAT CHESS GAMES (Andre Deutsch. 16s.) *illustrated with many diagrams, is edited by Reuben Fine.*

A further addition to the New Alpine Library is **THE STORY OF SKI-ING** (Eyre and Spottiswoode. 21s.), *by Sir Arnold Lunn.*

BEST CAT STORIES (Faber. 12s. 6d.) *is edited by Michael Joseph and illustrated by Eileen Mayo.*

40 YEARS IN FOOTBALL (Hutchinson. 12s. 6d.), *by Ivan Sharpe, contains a foreword by A. Brook Hirst, Chairman of the Football Association, and 13 illustrations.*

The 1952 edition of **SELL'S DIRECTORY OF REGISTERED TELEGRAPHIC ADDRESSES (with telephone numbers) AND CLASSIFIED TRADES** (Business Dictionaries Limited. £3 10s.) *marks the sixty-seventh year of the Directory's publication.*

ASSESSING MAIN STREET

A Survey of the American Transformation in Half-a-Century

This is a moment when people on this side of the Atlantic, deeply preoccupied by the news of the American election, are seeking for all the information they can about that astonishing world power, the United States, so full of paradox and anomaly. Such information amid the heat and rancour of election year is often, to say the least, misleading; and at any time perhaps this tends to be so, for the reason that America, for all the strength of union, cannot be regarded as a unity, so diverse are its elements, so distant the frontiers. The sectional approach is usually the wiser approach. In THE BIG CHANGE 1900-50 (Hamish Hamilton. 15s.) Frederick Lewis Allen attempts an assessment of the American transformation in the first half of the present century, and from the outset he recognises this sectionalism, how wide is the canvas, how many different kinds of picture he could paint. He is unstinting in his admiration for American productivity, the miracle of her technical progress, and he believes, indeed, that America has hammered out many remarkable changes in her way of life in the space of fifty years. Mr. Allen is disturbed, however, by the mediocrity of national education, by the tendency to "stand pat" among young people who should be evolving new thinking, and not least by the political inquisitions which have tended to make every man and woman of liberal thought glance over the shoulder before speaking outright. Despite *The Big Change* all, it seems, is far from being well on *Main Street*.

The name of Edward Allcard has been coupled with so much sensationalism that it is good to read his pleasant factual account of his return trip across the Atlantic when he was burdened (and blessed) with a stowaway, the lovely Otilia Frayao, and, making the best of things, journeyed with her from the Azores to Casablanca. Allcard calls his book TEMPTRESS RETURNS (Putnam. 12s. 6d.). It is written in sailor fashion, and what does emerge is that this rather lonely mariner and this very frightened but adventurous girl achieved between them such an admirable sea-going routine and such a mutual sense of companionship.

Here is the story of an amateur sailor learning a very unusual job, that of commanding men and attacking the enemy in a complicated and peculiarly hazardous form of warfare. IN ONE OF OUR SUBMARINES (Rupert Hart Davis. 18s.), Edward Young gives an enthralling account of his experiences in submarines during the Second World War, most notably with H.M. Submarine *Storm*. Nothing could be more human than his description of taking over his first command, giving his first orders when casting off, and sailing the submarine out of port. Commander Young has the reader on the rack all the time, and his tale is told in rather the same sailorly and simply effective prose as Edward Allcard's.

Dorothy Parker shared with O. Henry the ability to write most prolifically at the insistent baying of bank managers, and beyond that she hardly wrote at all. This is no uncommon trait, but it does rather explain why this new anthology, THE BEST OF DOROTHY PARKER (Methuen. 10s. 6d.), is rather a slim volume. Some readers may feel that much of the verse is trivial, but the sketches are admirable, not least "The Lovely Leave," a wartime story which concludes with a very neat O. Henry kind of twist.

Emile Gaboriau is probably the father of modern detective fiction, and his chief fictional character, the great Monsieur Lecoq, was certainly a forerunner of the Baker Street wizard, Sherlock Holmes. Gaboriau's CRIME AT ORCIVAL (Harvill Press. 9s. 6d.), quite a masterpiece of detective fiction, is now published in this country in a translation by M. Villiers. Crime at Orcival starts on the first page with the finding of the battered body of the Countess de Tremorel by two poachers on a river bank, and right to the last page the quest is fast and furious, with bankruptcy, elopement, poisoning, murder and suicide all playing their part in the drama. Thanks to Lecoq the web of evil is destroyed, the truth discovered, a charming love story brought to a happy conclusion; and what could be fairer than that?

Here is another translation from the French, but in rather different vein. In 1947 Yves Benoist-Gironiere, a French cavalry officer of great experience, published *La Conquete du Cheval*, a unique book on the practical side of training the horse, with special chapters devoted to the care of the horse, the rudiments of *haute ecole*, bitting, shoeing and show jumping, and he illustrated his own book in line and colour. Now under the title of THE CONQUEST OF THE HORSE, and translated by Major C. P. C. Macnaughton and Jean Boulting, the English edition makes its appearance. The publishers are Hurst and Blackett, and the price of the volume is 30s.

SHOOTER'S DELIGHT (Hutchinson's Library of Sports and Pastimes. 9s. 6d.) is the work of C. W. Thurlow Craig, who describes some of his experiences with a sporting gun in this country and in South America. The author has some interesting points to make on the art of refilling spent cartridge cases, an economy not to be ignored in these days of expensive and far from plentiful ammunition.

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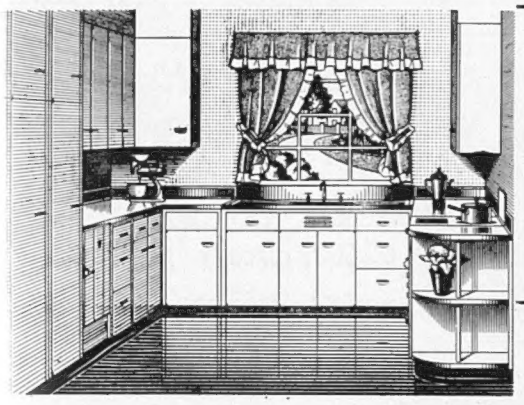

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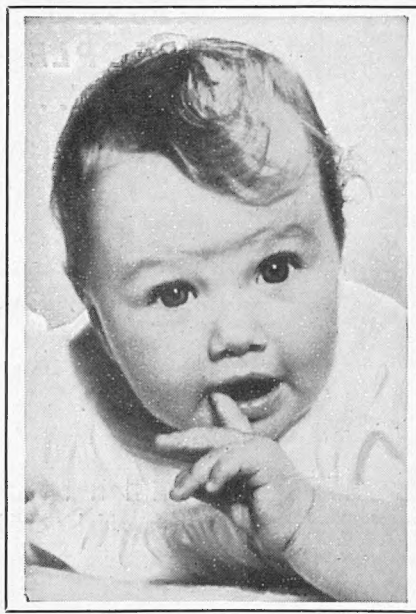

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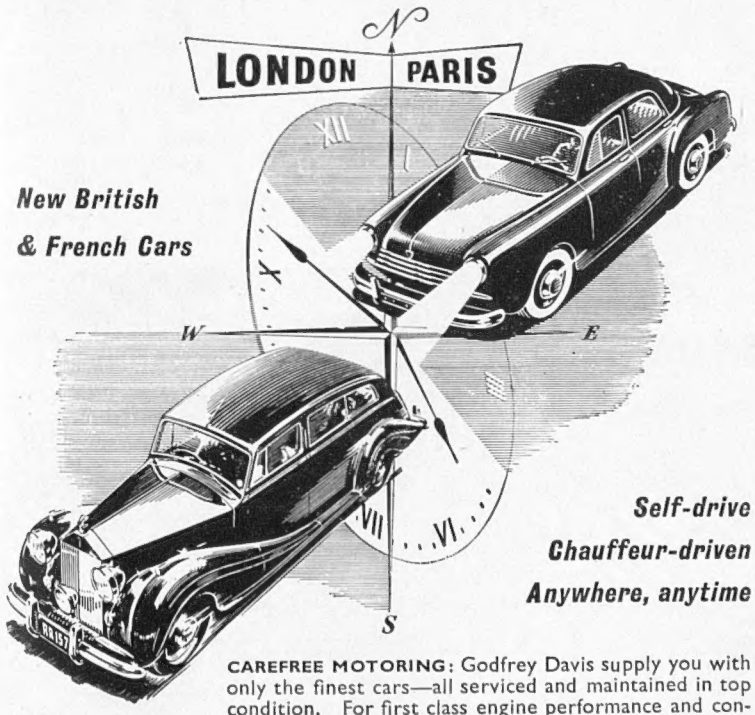

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VOL. MCIIL, No. 252 Schweppshire Post, 1952

With the Compliments of

Schweppshire Post

CRITICS' PAGE

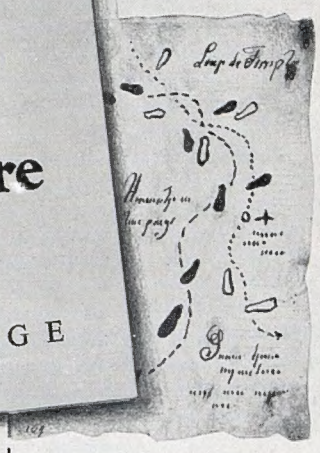
NEW HAMLET

Denmark à la mode

On the Boulevard Schweppesmann, a novel *Hamlet* to titivate the ever-varied taste of the *gamin à Paris*. By translating back into French the English version of Gide's notes for a French version of *Hamlet*, the elements of Shakespeare's work are silhouetted against a new and startling background. It is clear as never before that the real murderer of Claudius, Hamlet, was usurping the juster claims of the First Gravedigger to succeed to the throne of Denmark.

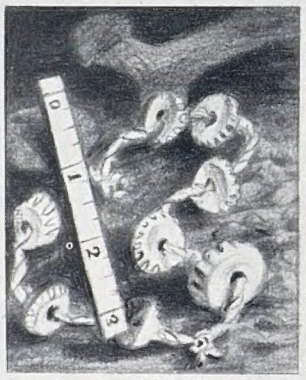
Was Hamlet Ophelia's Aunt?—is the question which this production dings relentlessly in the mind. So much so that we must ask why is it that never before has Hamlet worn spectacles? Except in the first scene, when Shakespeare specifically tells us that his short-sightedness causes him to be " too much i' the frown ", the symbolism of Hamlet's clearer vision is naturally linked with the Elizabethan vogue for glasses with rims of horn, when Ophelia deliberately describes Hamlet's " glass of fashion ".

BALLET



A new-found holograph of Schschwov, dancing master to the Princess Imperial, reveals the long-lost step " point-mains ", proving that " sur les pointes " originally implied the tip of the index finger.

Small wonder that the *première danseuse* of to-day, with the long pointed fingernails of 1952, finds this position difficult to maintain.



The Susschweppes Cork-Necklace.

An Interesting Find

EXCAVATIONS AT SUSSCHWEPPES

Here, with measuring rod in cms. to show relative size, is a string of early corks proving that a palaeoschweppic era did exist; though whether the corks were ever actually made of flint has never actually been proved. Some of these early corks are so rough that it is doubtful whether they were made by the hand of man or nature or what their function, or whence.

During the cress tea which followed the recent outing of the Wescht Schweppshire Archaeological Society, Mr. Geoffrey Coad-Sanderson, secretary, said: " No cork without a bottle ".

Is there a link between the civilisations in this fascinating Susschweppesian treasure and the recently excavated mug handles of the Persian Gulf?

CINEMA

MASTERPIECE AT THE 'FORWARD'

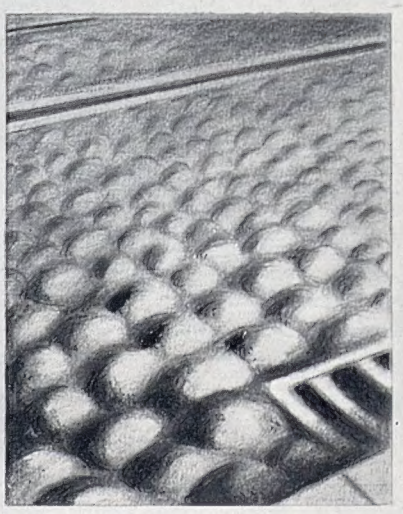
Motobicycletto (English sound-effects) is the simple story of a simple motor bicycle engine and the part which it plays in an ordinary simple community, set amidst the intangible beauties of the Via Latina. I, for one, was deeply moved by this plotless and featureless film of overtones and undertones.

Moses (at the Schweppza Cinema). This film cost twelve million dollars. Verdict: Hi-ya, Mose.

A book of COBELES

Architectural Notes

Our photographer, in this glimpse of a " book " or " sette " of cobbles in the road by the tramlines outside Schwapping Station has caught the natural beauty of intuitive design and instinctively unfettered composition of the untutored roadmaker. We have chosen this picture, taken with an ordinary box camera, because it illustrates also the intuitive beauty of natural design, and the instinctively unfettered roadmaker's untutored composition.



Written by Stephen Potter. Drawn by Lewitt-Him

SCHWEPPERVESCENCE LASTS THE WHOLE DRINK THROUGH

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